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ORIGINAL ARTICLES.

ARTICLE I.—BLOOD CHANGES IN SYPHILIS WHEN TREATED BY THE FLUID EXTRACT OF STILLINGIA COMP.—MCDADE-KING FORMULA. By EPHRAIM CUTTER, M.D., New York.

One of the last if not the last paper of that magnificent surgeon and physician, Dr. J. Marion Sims, shows his character in the lustrous light of a simple, child-like, genuine love of truth, justice and helpfulness to others. The picture is briefly this. More than forty years ago Dr. Sims knew that the medicine men of the Creek Indians had the reputation of curing syphilis. Lately he revisits the scenes of his youth, and, eager for truth, he finds that a Mulatto slave, "Horace King," made the preparation used, stillingia being well known as a principal ingredient of the remedy. He found that Dr. McDade investigated the formula used by the Mulatto, and had brought it into pharmaceutical standing and recognition. Dr. Sims then comes out boldly in the *British Medical Journal*, tells all he knows about this Indian remedy, gives due credit to and associates his own great name with that of Horace King, the slave (!) and now the medical world knows or is supposed to know of the value of the Indian Creek remedy in syphilis. How few physicians would have dared to do such a thing to connect their names with Indian remedies! Most have hesitated and wanted to know what (Dr. Blank or Dr. Strong) men high in the profession and of leading reputation had said about it, and if they had given a favorable opinion then would they have out with the story. But to Dr. Sims, conventionalities were like cobwebs, or as the ropes of the Philistines to Samson. One would have thought that he would have wearied with professional matters in his long-life service, but he never did. His grand, simple-hearted soul was keenly alive to the truth, and the good that could be done with it to help others. His mind was ever young and strong in its grasp. His enthusiasm never flagged. He eagerly seized new ideas to the last. Only a short time before his death the writer knew a physician to show him a porcelain stem pessary. He seized it with eagerness, and sent a glow of encouragement into the heart of the inventor by saying: "There is nothing like this in the world. Give me one to show to doctors at Paris."

A few days before his death, happening to hear the writer speak of a new mode of denudation in the operation for ruptured perinæum, the idea was taken in immediately, and, with a cross questioning worthy of the bar, he elicited every detail, and begged as a favor to see the operation. With such teachable condescension, magnetic force, courage, courtesy and childlike-simplicity, it is no wonder that he died the most honored and appreciated surgeon and physician

of his country and age. In humble admiration of his example, the writer desires to add a word of corroboration to Dr. Sims' valuable and historic paper. There are some physicians who are familiar with the morphology of the blood in syphilis. By microscopically inspecting the blood of a syphilitic they make out a diagnosis of the disease at once,with a certitude unusual in human affairs. Besides this, they tell when the patient is really cured by noting the disappearance from the blood of the peculiarities of syphilitic blood. Indeed, no other physical sign of therapeutic inspection in this disease is more useful than that of the exploration of the blood by microscopical inspection. This may be denied by some—but this denial not at all alters the facts of the diagnosis and treatment of syphilis by the gentlemen referred to.

Now, the point desired to be made here is that the use of the preparation here named by syphilitics, known to be such by rational and physical signs (including microscopic inspection), has been followed by the disappearance of the physical signs of syphilis, including those furnished by inspection of the blood.

FIG. 1.—ROUGH DIAGRAM OF SYPHILITIC BLOOD SPORES.

Figure 1 is a rough diagram, and shows the blood of a syphilitic with the embryonal forms of the vegetative spores (*Crypta syphilitica*), which are the dots seen in the interspaces between the red and white blood corpuscles. In the diagram they are of course immovable, but in the blood just removed from the stream of a syphilitic, and viewed under a 1-16 inch first-class Tolles' immersion objective, appear as auto-mobile globes, active with life, skurrying hither and thither with the ceaseless playing motions of proto-plasmic life. They are highly refractive bodies, and when a little out of focus they are copper-colored. They differ from the spores of eczema, which are darker, almost black and immobile. In old cases these spores are found in the primary

sore (with the mature plant) and in the secretions for the most part. Occasionally the mycelial or fully-developed filaments of the plant appear in the blood—smooth, cylindrical, sometimes tapering, bent or curled in twists, one end blunted somewhat, and, where a little out of focus, reddish copper-colored.

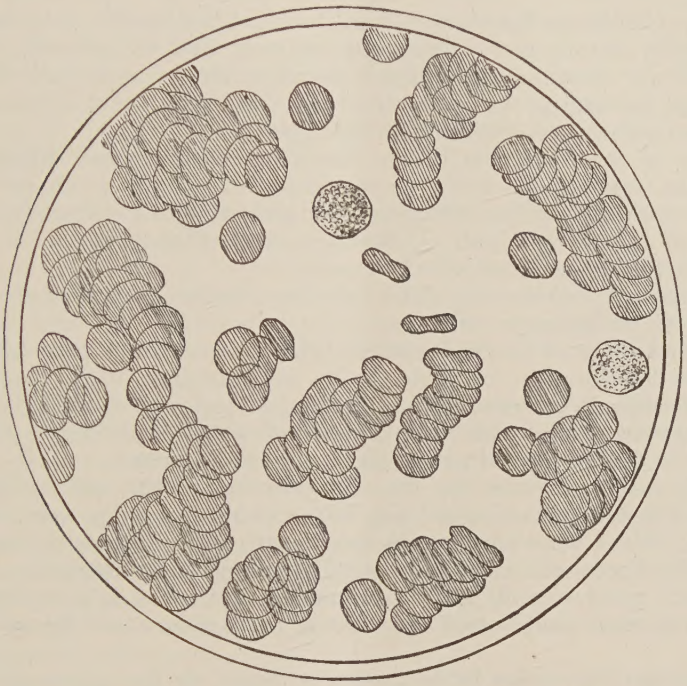

FIG. 2 SAME AS FIG. 1, WITH CRYPTA SYPHILITICA SPORES REMOVED.

Figure 2 is a rough diagram showing the removal of the spores of the *Crypta* by the Creek medicine. The preparation the writer has used mostly is that of T. Metcalf & Co., of Boston, Mass. This statement is made not at their suggestion.

The physicians alluded to test their treatment of syphilis by watching for the total disappearance of the spores. If they can be detected in the blood the cure is not regarded as complete.

There are other agents and means that will eliminate these noxious parasites, but as the object here is to corroborate the important paper of the distinguished dead by a statement of fact, not opinion, there is no need of mentioning them here.

ARTICLE II.—A PLEA FOR THE PESSARY. By J. McF. GASTON, M.D., Campinos, S. Paulo, Brazil.

The deviations of the womb from its normal position in the pelvis result from various causes, and are accompanied by modifications of the neighboring parts, which are interpreted differently by gynæcologists.

The displacements of this organ, when sufficiently marked to be easily recognized, as prolapse, anteversion or retroversion, are generally associated with impairment of the tonicity of the surrounding structures, and depend in part upon a diminution of nerve power in these tissues.

As I have to deal with the fact rather than the theory of the disturbed relations of the womb with its ordinary supports, it does not become me to speculate, nor does it devolve upon me to point out precisely in what the want of co-ordination consists. Yet it may be safely assumed that there is a lack of vital energy in these parts, upon which the ordinary and proper position of the organ depends.

Whether we incline to the view of Hamilton, that the trouble is to be referred to the bladder, rectum and pelvic muscles, or to that of Ashwell, Churchill, West and others, that it is a combined result of the relaxation of the uterine ligaments and the vagina, we must still accept the view of Hohl, that any or all these changes spring from diminished vital power.

The origin of the relaxation in the fibres composing these different parts consists in the want of tone in the nerve element of these tissues, and we must seek for an explanation of the difficulty in an alteration of the dynamic influence on the part of the nerves which regulate the contractility of muscular and ligamentous structures associated with the womb.

In the cases of violence by which sudden displacement is produced, there can be no such preliminary condition.

Yet the persistence of this dislocation of the organ induces gradually and insensibly the deterioration of tone in its surroundings, which accomplishes eventually the change in nerve power, which is a primary modification, under other circumstances, of what is to be considered causative ordinarily, because a consequence in this piecemeal operation of the displacement.

The preliminary condition for the deterioration of the contractility in the muscular and ligamentous tissues being impairment of nerve power, we are prepared to understand what must be its counterpart, and to appreciate the elementary principle of recuperation. It is essential to regain the original constitution of the healthy nerve supply to all the co-ordinate tissues, as a prerequisite for restoring the normal condition of the different parts upon which the womb is dependent.

The replacing of the organ in its proper relation to the surrounding structures cannot afford relief without at the same time imparting the appropriate vital energy to those tissues with which it is associated in the pelvis. While measures should be adopted to maintain the womb *in situ*, our attention must also be directed to a rehabilitation of the parts corelated with it in its vital manifestations.

We may prop up a tree which has been blown down, but if the dirt is not drawn about its injured roots, and water is not applied to favor its nourishment by the soil, it will wither and die. So it is with the support of the womb by mechanical means, and they must be accompanied with proper nutrition of its vital supports. The relaxed and dilated walls of the vaginal canal need to be restored to their proper state of contractility, which is not consistent with the use of any foreign body within its cavity that shall keep up distension of its tissues. It is not to be inferred from this injunction that I regard this canal as indispensable for retaining the womb in its position. All who are familiar with the location of the perinæum and the division of the recto-vaginal septum, must have observed cases in which the support of the vagina is entirely destroyed without leading to any material descent of the womb. And still less can the integrity of this canal influence the deviations, anterior and posterior, of this organ. Yet the complete restoration of the tonicity of this canal is a factor of importance as a concomitant of correcting the prolapse of the womb, and hence to be secured, if practicable.

Other elements of support, doubtless, contribute more to maintain the womb *in situ*. This must depend to a great extent upon its lateral and antero-posterior fastenings within the pelvis. The broad and round ligaments, with the

reflexions of the peritoneal membrane from the bladder over the fundus extending to the rectum, with its attachments to the concavity of the pelvic basin, must contribute materially to resist the weight of the superimposed intestines. The action of the diaphragm in vomiting or in coughing tends to depress the womb in the pelvis and even forces it down in the vagina, but its elastic fastenings seem to restrain this impulsive influence, so that it recoils upon the removal of such pressure. In making an examination per vaginam, while the patient is coughing, it is notable that the finger placed in contact with the os tincæ is thrust downward at each contraction of the diaphragm from the force exerted upon the womb. But the organ immediately regains its original position upon the cessation of the act of coughing, and this must be attributed to the elastic contractility of its supports from above.

Should these connections lose their property of contracting, the organ becomes depressed, or deviates anteriorly or posteriorly from its normal position, so that without the co-ordination of forces in the attachments of the womb there cannot be stability in its relations to the surrounding structures.

Thus we have a key to the nature of the change to be effected in maintaining the organ *in situ*, and while mechanical measures are resorted to for connecting the position, they must not interfere with the appropriate vital capacities of these tissues.

It is practicable to adjust an apparatus of such form and in such a manner as to retain the womb in its normal relations to the surrounding parts, and at the same time allow the proper discharge of all the functions pertaining to those parts, so that the enfeebled organism may regain its natural vigor.

To afford the requisite support to the organ is a simple mechanical proceeding, but to reinstate the tone of the co-ordinate structures, so that it may be kept in its place after the artificial prop is removed, is the desideratum for the gynæcologist. If any plan is feasible for carrying on *pari passu* these two processes, it should be adopted in preference to any course which lacks these characteristics of efficiency.

Such a staying up of the womb as is compatible with a permanent restoration of its natural support is alone entitled to our confidence.

All practical observation confirms the utility of a masterly inactivity on the part of the patient for the correction of the lesser deviations of the womb from its normal relations. But there is quite a diversity of opinion among professional men as to the expediency of continuing the recumbent position for any considerable period. In the extreme cases of prolapse or of procidentia, there is no alternative but to maintain the horizontal position for a time after the reduction of the organ, so that it may accommodate itself to the change.

But it is evident that the patient cannot regain strength of body and elasticity of fibre in the lying position so advantageously as when allowed freedom of action, and hence it is important that our treatment may be so conducted as to admit of exercise to a limited extent in the open air.

I am not disposed to urge any effort which may tax the strength of the patient, but that in proportion to the capacity for action exercise will be advantageous, and some form of pessary must be worn.

ARTICLE III.—REPORT OF A CASE OF OVARIAN TUMOR. Read before the Central District Medical Association," of Kentucky, July 18, 1883, by J. M. MEYER, M.D., A.M., Danville, Ky.

On June 21, 1883, Mrs. A. M. submitted to abdominal section for ovarian tumor. History: The patient is of a delicate frame, sanguino-nervous temperament, never having robust health, but of active habits, with a well-disciplined mind; for many years a successful school teacher; for three and a-half years married; the mother of one child, now one year old.

During her menstrual life, her periods have been generally regular, with no marked abnormalities.

The precise date of this ovarian trouble is not known, but is supposed to have set up during gestation.

Early in her pregnancy she was seriously threatened with miscarriage; but, by perfect rest and the judicious use of opiates, these passed away, and gestation went on to that time.

The confinement was tedious, and resulted with a slight laceration of the perinæum, an event liable to occur in any one whose marriage is delayed to 30 years. After recovering from her confinement, which was on the 11th of July, 1882, it was noticed that there was marked development of the abdomen, with prolapsus of the uterus, which was supposed to result from a torn perinæum. On the 21st of September, it was determined to operate upon the perinæum, Drs. Jonstone and Bogle being present. The anæsthetic being administered, it was thought best to make a thorough examination (prior to the operation), which soon discovered an ovarian tumor of considerable size. The operation was abandoned, the patient aroused, and the true nature of her case explained. Subsequently ten pounds of fluid were drawn by aspiration, completely emptying the sack, an examination of which made sure the diagnosis. A tonic course of treatment was followed, with a view to be well prepared for an operation upon a refilling of the sack. The patient did well, no refilling took place until April, when it made rapid progress. Frequent examinations were made, a consultation called, a free candid disclosure made, and the operation determined upon. The menstrual period being now due, ten days' delay was had for recovery and preliminaries.

On June 21, 1883, there were present, by invitation, Drs. C. H. Spillman and Son, Harrodsburg; McReid, Jonston, Fayette; Dunlap and J. C. Boyle, Danville, and R. C. Caldwell, of Bloomfield.

At a quarter to eleven I began the administration of the anæsthetic; some delays ensued from nausea and vomiting, but the patient bore it well and was kept under its influence for two hours.

To Dr. Jonstone was assigned the surgical department; to the other gentlemen the various details incident to the operation. The cut was made in the median line, one inch below the umbilicus, and extending four inches; the cavity entered. Exploration discovered no adhesions, the left ovary being involved, a trocar was plunged into the sack and fluid drawn off, the tumor withdrawn, the pedicle transfixed and secured with silk ligature, excised and dropped into the cavity. Search was made for the other ovary, which was diseased also, this being ligated, removed, and the stump replaced. All bleeding vessels being secured, the abdominal cavity was thoroughly washed with pure hot water, the stumps re-examined, and the incision closed with eight silk sutures, the wound packed with absorbent cotton held by adhesive strips and a broad binder.

For twenty-two hours the patient suffered from extreme nausea and vomiting. Reaction was promoted by the liberal use of bottles filled with hot water and placed about her body and extremities. In 24 hours the temperature ran up to 102°, pulse 120. These gradually subsided to the normal in a week. The appetite gradually returned. Warm drinks, generous soups, whiskey toddies, were used for four days, when a more solid régime was resorted to. Sleep was promoted by an occasional opiate. The bowels were opened on the fourth day by salts in broken doses. On the sixth and seventh days, a dose of calomel and Dover's powder were given, with the happiest effect. On the sixth day each alternate stitch was removed, followed by a drop of pus. On the eighth day the remaining ones were removed, the wound being healed. For a week Dr. J. and myself were alternately present, without an unfavorable symptom. We were jubilant!

But now, cold extremities, clammy sweats, loss of appetite, temperature at

103° ensued. What is the matter? Malaria is suspected, and quinine is liberally used. For ten days the bowels were constipated, the tongue white, anæmic, and temperature 103°. Quinine in 20-grain doses was given, followed by 10-grain doses of calomel each night for two days, when the bowels were freely evacuated, followed by a return of appetite and a subsidence of temperature. During this time some pelvic cellulitis ensued, which was treated with the hot vaginal douche every four hours, which soon brought about absorption. At the close of the second week our sky began to brighten, which has resulted in perfect recovery.

Remarks.—Ovariotomy has opened the field to abdominal surgery. To-day there is not an organ within the abdominal walls that may not be explored with safety. Surgeons are justified in entering this cavity in search of occult and difficult facts in diagnosis. Already the kidney, the spleen, the uterus, nay, almost every organ, has been excised with perfect recovery. And what is not within the power of enlightened surgery? We have seen the beginning, but who will see the end?

ARTICLE IV.—BIOGRAPHY OF DR. J. MARION SIMS. Read by J. M. TONER, M.D., at the Sims' Memorial Meeting of the Medical Society of the District of Columbia, in Washington, D.C., November 21, 1883.

James Marion Sims, M.D., was born in Lancaster District, South Carolina, January 25, 1813, and died suddenly of heart disease at his residence, 267 Madison avenue, New York, November 13, 1883. He was a descendant of the great Scottish chieftain Rob Roy MacGregor. His birth-place was in the vicinity of the dividing line between North and South Carolina, near where President Andrew Jackson first breathed life. Having received a good preparatory education at the common school and from private tutors, he also became well grounded in the classics and acquired a knowledge of French, which he spoke and wrote with readiness. At a suitable age he entered South Carolina College, and graduated in letters in 1832. His medical studies were pursued first in Charleston, South Carolina, then in Philadelphia, Pennsylvania, where he received the degree of M.D. from the Jefferson Medical College in 1835. The following year he began practice near Montgomery, Alabama, and a year later he removed to that city, where he acquired a large and lucrative business. In 1845 he communicated to the profession some new views on "Trismus Nascentium," which he published in the *American Journal of Medical Science*, in 1846, and a second paper on the same subject in 1848. In following the professional labors and life of Dr. Sims it should be borne in mind that he was scholarly and well-read in his profession, a good general practitioner, a careful diagnostician, and a fearless and dextrous surgical operator, before he developed the specialty of gynæcology. Although this is well-known to the older members of the profession, it is fully manifested by the subjects which early engaged his attention as an author. His first five contributions to medical literature were upon diseases and operations of interest to the general practitioner and surgeon. It was not until 1852 that he published any account of his discoveries and operations, which he followed with such an amount of success, and which justly brought him such distinguished honors.

In 1845 his attention was especially called to the subject of vesico-vaginal fistula, which previous to that time had been much neglected by surgeons, or deemed incurable. Dr. Sims conceived the idea of relieving these victims by a surgical operation. To this end Dr. Sims established at Montgomery a private hospital into which he received patients suffering from this accident, and after many efforts and modified operations he, in 1849, fully established the fact to the profession that his operation was a success. The devotion and earnestness with which he pursued this branch of surgery led to the invention of a number

of new and important instruments and devices to accomplish the results desired, some of which bear his name. Among them is "Sims' speculum" and the use of "the silver wire suture," which instead of the silk thread was of great value. Subsequently he used the silver wire suture in all operations where sutures were required. Owing to unceasing toil his health failed in 1850, and in 1851, while confined to his room from his severe and protracted indisposition, which he and his friends feared would terminate in death, he wrote his famous paper on "Sims' Operation for Vesico-Vaginal Fistula," which was published in the *American Journal of Medical Science* for January, 1852.

The good results which had been obtained in his hospital for the especial treatment of diseases and accidents to which women are liable, reports of which were, from time to time, published in the medical journals, awakened in the profession much interest, and patients were sent to consult Dr. Sims from all parts of the country.

A change of climate, on account of his health, as well as to find a larger field for professional work, led him to remove to the City of New York in 1853.

Although his health was not fully restored, he, with the encouragement of some of the leading physicians, within a year commenced the founding of a woman's hospital in that city, which through his energy, efficiency and surgical skill, and under the patronage of some forty of the first ladies of New York, became, in 1855, an established fact.

To bring the subject directly before the profession of the City of New York, Dr. Sims determined to deliver an address to the profession and the public on the necessity of a hospital for women. The following is a copy of the call which was published in the leading city papers:

"Lecture on the necessity of organizing a great Hospital in this city for the Diseases Peculiar to Females. The undersigned will deliver a lecture on this subject at the Stuyvesant Institute, No. 659 Broadway, on Thursday evening, the 18th inst., at 8 o'clock. The medical profession and the public are respectfully invited to attend.—J. Marion Sims, M.D., 77 Madison avenue."

From the New York *Tribune*, May 17, 1854.

As this was a most important juncture in the professional career of Dr. Sims, we will be pardoned for referring to the effect of the lecture, as he chose to call it, upon the profession and the public. The New York *Post*, and also the New York *Times*, on the morning of the 19th, each had brief notices of the meeting, thus cautiously commending its objects:

The following is from the New York *Times* of May 19, 1854: "Dr. Sims on a Hospital for Females.—In spite of a heavy shower that fell just at the hour when the meeting was announced to open, the lecture room of the Stuyvesant Institute was nearly filled last evening with persons who were present to hear Dr. Sims on the reasons why a hospital should be established in this city for the treatment of the diseases peculiar to females. A large proportion of those present were physicians. Some of the 'solid men' and a number of ladies were in attendance, too. The doctor spoke with great earnestness, and directly to the point, at times becoming eloquent with his subject.

"He aimed, by the history of a Southern institution with which he had been connected, and its results, to show how much might be done in this city, and how great was our need. The attention was undiminished to the close, and it was evident that the right impression had been made.

"On sitting down, Dr. Griscom, of New York Hospital, after a few complimentary remarks, moved that those present organize themselves into a business meeting, and nominated Dr. Edward Delafield to the chair, and Dr. Edward Beadle as secretary, which was seconded by Dr. Gardner, and which motion was unanimously confirmed.

"Dr. Griscom, in the course of his remarks, said that the interests of humanity united in demanding such a hospital. He remarked that a large percentage of the cases of insanity in our insane asylums is due to the neglected diseases of females.

"A resolution of thanks to Dr. Sims was unanimously passed, and another resolution approving of the project, and that a committee of ten persons—five physicians and five laymen—to devise ways and means to accomplish it be appointed, was also passed.

"The committee is to be named by the President, and hereafter through the press. Meanwhile the project will be discussed by the profession, and we trust not ineffectually. The labor of establishing a new hospital in this city is not a trifling one. But there is a demand for more hospital room for these special diseases—a most urgent demand. We trust that the benevolent will turn their attention this way."

The project and the address is commented upon in the *The American Medical Monthly* for June, 1854, p. 479, in the following language: "On the evening of the 18th ult., 1854, a number of professional men and others, about two hundred, among whom were conspicuous five ladies, attended the Stuyvesant Institute by invitation, to hear Dr. Sims' argument in favor of a hospital for the reception and treatment of diseases peculiar to women.

"The lecturer traced the history of his operation for vesico-vaginal fistula, and related in a pleasing and effective manner the various steps by which he had attained progressively to the present excellence in the performance of this great achievement in curative surgery.

"It was a striking narrative. The obstacles and difficulties he encountered, and from every quarter the failures and disappointments which mortified but did not subdue him, the discouragements of friends and the sacrifice of time, money, bodily and mental labor, would have been sufficient to defeat a less resolute will, to try a faith not sustained by the soundness of principles which directed him, and the sufficiency of the science on whose altar he was laboring to place the trophy of perseverance, ingenuity and devotion.

"At the conclusion of the lecture, Dr. Delafield was appointed chairman of the meeting, and Dr. Beadle secretary, when two resolutions were unanimously passed, one expressive of accordance with the views propounded by the lecturer, the other appointing a committee of ten, comprised of five medical men and five lay members, to devise a plan for accomplishing so desirable an object as the establishment of the institution then so eloquently advocated."

The committee of ways and means was composed of Drs J. W. Francis, Valentine Mott, Alexander H. Stevens, Horace Green, J. Marion Sims, Peter Cooper, Hon. Erastus C. Benedict. An appropriation of $2,500 was obtained from the City Council, with which, added to funds raised by the ladies, a house was rented for temporory use, and the hospital opened in May, 1855.

The New York *Medical Times* for June, 1855, p. 368, has the following: "Woman's Hospital.—A building on Madison Avenue, No. 83, having been rented for the purpose of this institution, it was formally opened on the 2nd of June, 1855, being the first hospital of the kind in New York. Dr. J. W. Francis, one of the consulting physicians, presided, and delivered an appropriate address commendatory of the object. The other prominent speakers on this occasion were Drs. E. H. Dixon (of the Scalpel), D. M. Reese and Horace Green. There were at the time nineteen patients under treatment."

Dr. Sims had been elected attending, and Drs. Mott, Stevens, Francis, Delafield and Green, a consulting board. The institution was patronized by patients from all parts of the country. The success attending the treatment given, and the important operations performed in it, speedily demonstrated its usefulness and the need for an enlarged establishment.

During the sessions of the New York Legislature of 1857 and 1858, Dr. Sims, aided by influential gentlemen of New York City, obtained a charter for "The Woman's Hospital for the State of New York," and received from the city a grant of a block or square of some eighty thousand feet of ground, and an appropriation of $10,000 to assist in erecting suitable buildings for hospital purposes near the Central Park, opposite Columbia College.

Dr. Sims made a careful study of hospital designs and plans, and finally recommended the pavilion system as the best suited to the purpose.

The first pavilion, with a capacity of 70 beds, was completed and occupied in 1866. Largely through Dr. Sims' personal efforts, and the merits of the work done in the hospital, aid was at different times obtained from the State to the amount of sixty thousand dollars for the institution. A second pavilion was opened in 1876, and the combined capacity of the two pavilions is two hundred and sixty beds. This hospital is at once a grand monument to the genius of Dr. J. Marion Sims, and to the humanity and medical progress of the age. In 1861 Dr. Sims first visited Europe, chiefly to study hospital construction and their sanitary requirements. His arrival was everywhere heralded with encomiums of praise for his valuable discoveries and surgical skill, and he received from the profession in all the large cities and hospitals of Europe such a welcome as has rarely or never been given to a medical man. He was pressed to operate in many of the leading hospitals, and by surgeons who themselves enjoyed world-wide reputations.

Dublin, London, Paris and Brussels were each in turn the theatre of his surgical triumphs. He operated in nine different hospitals in London, and perhaps a greater number in Paris. His successes were so noted and brilliant that he speedily received decorations from the Governments of France, Italy, Germany, Spain, Portugal and Belgium as a public benefactor. Indeed, he received two medals from the Government of Italy.

From France he received the Order of the Knights of the Legion of Honor, from Belgium the Order of Leopold I., and from Germany the Iron Cross.

Having returned in 1862, after a brief stay at his home, he revisited Europe, to place his children at school, but with the intention of returning to his practice in New York, which had grown to be large, responsible and remunerative. But as soon as it was known that Dr. Sims was again in Paris, patients flocked to him in such numbers from all parts of the world as to fully occupy his time, and rendered it next to impossible for him to refuse treatment, and it was not till 1868 that he again returned to New York and resumed his practice, his family remaining in London.

At the opening of the Franco-Prussian war in 1870, Dr. Sims happened to be in Paris, and was the prime mover in organizing what is known in history as the Anglo-American Ambulance Corps, and was made its surgeon-in-chief. The organization did good service at and after the battle of Sedan, which led to the downfall of Napoleon III. He was placed in charge of Mayory Hospital, with over four hundred beds, and served faithfully and efficiently for a month, when he resigned the position and returned to Paris. He was one of the escorts that attended Marshal McMahon from the field when wounded by a shell.

The incident was gracefully remembered and acknowledged by the Marshal, who gave him 1,000 francs to purchase delicacies for those confined to the hospital. A report of the services and operations of the Anglo-American Ambulance Corps was made by Dr. Sims' first assistant, William McCormack, now Sir Wm. McCormack, and was published in London in 1870. I am unable at this time to give a full list of Dr. Sims' contributions to journal medical literature. Whenever he wrote he had something to say which the profession was ready and anxious to hear from so original and able an exponent of the art

and principles of medicine. The following is presented as an approximate list of Dr. Sims' publications. Most of his writings have been translated and published in the French, German and Italian languages:

"An Essay on the Pathology and Treatment of Trismus Nascentium, or Lockjaw of Infants." 8vo. pp. 21. Philadelphia: Lea & Blanchard. 1864. From *Amer. Jour. Med. Sc.*, April, 1 846, Vol. II., p. 363.

"Removal of the Superior Maxilla for a Tumor of the Antrum. Apparent Cure. Return of the Disease. Second Operation. Sequel." Illustrated by woodcuts. *Amer. Jour. Med. Sc.*, April, 1847.

"Osteo-Sarcoma of the Lower Jaw. Removal of the Body of the Bone without External Mutilation."—*Amer. Jour. Med. Sc.*, October, 1847.

"Further Observations on Trismus Nascentium, with cases Illustrating its Etiology and Treatment."—*Amer. Jour. Med. Sc.*, July, 1848, pp. 59 to 78.

"Further Observations on Trismus Nascentium, with cases Illustrating its Etiology and Treatment."—*Amer Jour. Med. Sc.*, October, 1848, pp. 354 to 366.

"On the Treatment of Vesico-Vaginal Fistula." With illustrations.—*Amer. Jour. Med. Sc.*, January, 1852.

"On the Treatment of Vesico-Vaginal Fistula." A reprint. 8vo. pp. 28. New York. 1853.

"On the Treatment of Vesico-Vaginal Fistula." By J. Marion Sims, of New York, late of Montgomery, Ala. Philadelphia: Blanchard & Lea. 1853. Pp. 28.—A review in the New York *Med. Times*, December, 1853, p. 104.

"Two Cases of Vesico-Vaginal Fistula, cured by J. Marion Sims, of New York, late of Montgomery, Ala."—New York *Med. Gaz.*, January, 1854, p. 1, with an illustration.

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As Dr. Sims was a frequent contributor to the current medical journals, a more careful study will greatly increase the list. And he was an active or corresponding member of many medical societies in America and Europe, besides being an honorary member of the Edinburg, Brussels, Berlin, Christiania, Paris, and Dublin societies, a Fellow of the Obstetrical Society of London, and numerous other medical and scientific bodies at home and abroad.

He was a member of the Alabama State Medical Association, New York County and State Medical Society, New York Academy of Medicine, New York Neurological, Pathological and Surgical societies. Honorary member of the Connecticut State Medical Society, Virginia, South Carolina and California State Medical Societies.

Dr. Sims became a member of the American Medical Association in 1852, as a delegate from the Alabama State Medical Association; and in 1858 attended for the Woman's Hospital of New York. He also attended meetings of this organization in 1860, 1872, 1874, 1875, 1876, 1877, 1880, and was president of it in 1876. He was also a member and president of the American Gynæcological Society, and has contributed ably to its transactions. His skill and experience in the obstetrical art led to his engagement to attend the accouchement of the Empress Eugenie, of France, and also to attend the Empress of Austria. His practice in Europe was largely among the nobility, from whom he received large fees and valuable presents. The Doctor visited Washington City but a few months ago, and selected and purchased a most eligible site for a residence, and looked forward to the enjoyment of a home in this city a few years hence, when he should retire from active practice.

He was, when here, in apparently good health, and certainly looked remarkably well, but spoke of the necessity he was under as to being careful as to diet and exposure.

Wishing to avoid the rigor of our winters he proposed to visit Italy, and anticipated a delightful visit to Rome, where he spent last winter. Some three years since, Dr. Sims suffered from a severe attack of pneumonia, since which time, in cold weather, some unwelcome heart symptoms were from time to time observed. Hence, for the past two years, he has passed the winter months in the South of France and in Rome, and the remainder of the year in other parts of Europe, France, and the United States.

Dr. Sims was united in marriage, Dec. 21, 1836, to Eliza Theresa, daughter of

Dr. Bartlett Jones, of Lancaster, S.C., who, with seven children, survives him. His son, Henry Marion Sims, is in active practice, and most abundantly inherits the ability and skill of his father, whose memory the whole medical profession loves to honor, for by his genius the science and the art of medicine has been advanced as much, if not more, than by any medical man of the present century. Dr. J. Marion Sims' name will stand in the history of the progress and discoveries in medicine, associated with Harvey, Morgagni, Laennec, and other grand characters who have heroically and successfully devoted themselves to the science and the art of medicine for the benefit of mankind.

Biographies of Dr. Sims were published some years since in Johnson's "Universal Cyclopædia," in "Physicians and Surgeons of the United States," and in the *Virginia Medical Monthly*, from all of which the material for this sketch has been freely drawn.

An excellent portrait, engraved by R. O. Brine, from a photograph by Kurtz, was made some years since. It exhibits the Doctor at about the age of sixty, and wearing his decorations. It also contains a fac-simile autograph. A fine marble bust of the Doctor was, in March 12, 1880, presented by the surgical staff of the Jefferson College Hospital to the Alumni Society of Jefferson College. This Society has presented it to the trustees of the Jefferson College Hospital, and it now occupies a conspicuous place in the hall of that institution. In commemoration of the founder of the Woman's Hospital of New York, a fine marble bust of Dr. Sims was presented to the institution by Mrs. Russell Sage, a few days since, on the twenty-ninth anniversy. The bust was cut by Dubois, of Paris, and is a good likeness of the great apostle of gynæcology, and a splendid work of art.

Dr. Sims' funeral took place, in an unostentatious manner, from the Madison Square Presbyterian Church, where he was one of the oldest pewholders, on Friday, November 16th, and was largely attended by the medical profession and leading citizens of New York. The Rev. Charles H. Parkhurst, minister of the church, conducted the services, and eulogized the character and achievements of Dr. Sims in merited and glowing terms. The interment took place in Greenwood Cemetery. Peace to his ashes.

RÉSUMÉ OF ORIGINAL ARTICLES

IN OTHER JOURNALS.

Sterility due to Contraction of the Uterine Cervical Canal. Complicated or not by Flexions or Versions, successfully treated mechanically by the Uterine Bougie.

Undoubtedly the most numerous cases of sterility are due either to a simple contraction of the cervical canal, or to such contraction complicated with one of the various flexions or versions of the uterus; and although treatment of the former by dilatation and the latter by pessaries has long been in vogue, patients and gynæcologists have shared their disappointments innumerable. Convinced that pessaries in women who have not borne children frequently give rise to irritation or inflammation, thereby adding another impediment to conception, Dr. E. A. Spooner, in *American Journal of the Medical Sciences* for January, 1884, states that he has long since abandoned their use in the treatment of these cases, employing such supports for patients requiring relief from prolapsus

or other displacements without regard to the question of conception. Fortunately, many cases of flexions or versions are amenable to the treatment of the uterine bougie, and when occurring as complications of a partial atresia of the cervical canal, the correction is readily made coincident with the dilatation, and he has been surprised at the ease with which long-existing and extreme flexions have yielded to the plan of treatment by bougies, which he describes in detail and illustrates with the histories of several successful cases selected from his note-book.

CLINICAL HISTORY OF A CASE OF RECURRENT DROPSY OF THE LEFT MIDDLE EAR, COMPLICATED, AFTER EIGHT YEARS' DURATION BY AN ACUTE ATTACK OF MONOCULAR OPTIC NEURITIS (CHOKED DISK) ON THE SAME SIDE, FOLLOWED BY GENERAL TABETIC SYMPTOMS.

In *The American Journal of the Medical Sciences* for January, 1884, Drs. Burnett and Oliver record this very rare case, which is as yet unfinished. They enumerate the four following factors of disease as being the cause of the patient's condition.

First. The early appearance in life of a polypoid growth in the right ear, which, upon being extracted, caused obliteration of the right auditory canal, and destruction of the contents of the middle ear. A partial loss of motility of the facial muscles upon the same side took place at the same time through peripheral traumatism; although this was not of sufficient moment to cause interference with their electrical reactions.

Second. A chronic catarrhal inflammation of the left middle ear, of an exceedingly rare and almost unique type. The peculiarity consisting in the formation and the retention of a sero-mucous fluid within the tympanic cavity, which required frequent evacuation, each operation being productive of a marked increase in audition. The tendency to the accumulation of the liquid at last ceasing, with a return of the power of hearing to a relatively normal standard, this being purely local in origin.

Third. This conclusion is divided into two probable conditions, there not being any proof of an individual or combined existence.

A. A chronic pachymeningitis, limited to the anterior two-thirds of the left base, involving a few of the nerve sheaths at their foramina; causing sub-vaginal œdema, with a consecutive neuritis and partial atrophy.

B. A new growth, very chronic in its development and course, situated in any part of the brain. The neoplasm causing pressure in all directions, with accidental passage of arachnoidal fluid through a few of the weaker foramina into the outgoing nerve-sheaths; this serous exudation producing incomplete choking of the nerve, followed by inflammation and atrophic degeneration.

Fourth. Sclerosis of the posterior columns of the spinal cord, the disease having advanced as far as the beginning of the stage of full development, without complication or extension of morbid process.

TREATMENT OF MELANCHOLIA.—Dr. J. G. Kiernan (*Detroit Lancet*, Detroit, Mich.,) makes the following remarks upon this subject: "Should the patient be removed from home? He should at all events be removed from the surroundings under which his insanity developed. To do this it may in many cases become necessary to send him to an asylum; but where he can be transferred from his home under tender guardianship, and can travel, this measure will not be found necessary. Cheerful surroundings, and encouragements to engage in pursuits different from those usual to the patient, will often prove of value. Cold sponging helps the deficient capillary circulation. Morphia and cannabis Indica are pre-eminently indicated. Glonoin and amyl nitrite are especially use-

ful in the atonic condition, and sometimes cut short the affection in the first stage. Tonics are of course indicated. When practicable, alcoholic stimulants are of great value. Conolly found sherry and egg to act well as a night-cap, and egg-nogg has very similar effects. Turpentine enemata often have good effects on the anæsthesia of the intestinal canal. Artifical feeding is often and pre-eminently indicated in these cases. The Davidson syringe, with a long tube, passed through a wooden gag with a large opening therein, is the best means of administering food. He has fed patients for months in this way. To prevent anæsthesia of the digestive tract occurring, the food should be given in small quantities frequently repeated. Egg-nogg alternated with beef-tea and egg is the best form of artificial food. All somatic complications should be guarded against. Emmenagogues should be given to amenorrhœic females. The muscles of the chest wall should be faradised, and, where practicable, massage performed. Constant watchfulness is required in all cases of lypemania. The patient should be induced to labor where close surveillance is practicable. In the first stage, conversation and surroundings of an intelligent, stimulating nature produce a good effect on the patient.

Conjunctival Osteomata.—Dr. E. J. Loring reports (*New York Medical Journal*) a case in a healthy and well-developed child of eight months. Just after birth, a small fold of "skin" was noticed in the upper and outer angle of the eye. This began to be more and more apparent until the child was five months old. It did not change during the last three months. The eye has never been red, except to a trifling extent, only at times over the fleshy protuberance, nor has there been any pain. The protuberance presented the appearance of a small oval cystic growth, midway between the outer angle of the eye and the edge of the cornea, and was in about the horizontal meridian. Not until the forceps touched the mass after opening into the fold was its bony or cretaceous character suspected. It was firmly attached to the conjunctiva above and at the sides, though it did not appear to be attached at all to the globe. The wound healed kindly, there only remaining at the end of the fourth week, when the child was last seen, a slight injection along the wound. The other eye was perfectly normal. The child has a slight nævoid-looking spot on each upper lid. The weight of the mass was 45 milligrammes; length, 8 mm.; width, 5.5 mm.; height, 2.5 mm. It was oval in shape, with the long diameter in the horizontal meridian of the eye. It was convex above and concave below where it rested upon the sclera.

Hiccough.—A. G. Vogeler (*Druggist*, December, 1883) says that hiccough arising from acidity of the stomach may generally be stopped, as is wellknown, by an antacid. Ether or chloroform is also good, but when of purely nervous character, the best remedy will be found to be tincture of castoreum in drop doses on a little sugar placed on the tongue and allowed to dissolve. Castoreum is much hooted at by modern practitioners, as also is lactucarium; but both drugs possess more therapeutical value than is now generally admitted. They will be rescued again from temporary oblivion, the same as many other half-forgotten articles of materia medica, and be again heralded as valuable remedies.

Quinine.—Dr. Young (*Practitioner*) gives the following indications and contra-indications for the use of quinine: Never give quinine in antipyretic doses in cases where the bowels are confined and the secretion of urine is scanty. In cases where it is being administered and an increase of dose is desirable, this may be safely done if the skin, bowels and kidneys maintain their normal functional activity. In many cases of remittent and intermittent fever, the combi-

nation of the drug with ammonium chloride, or a potash or soda salt, is likely to be more easily tolerated, as well as more useful, than if it be administered in a pure form. During the administration of quinine, should a headache come on or increase in intensity, the case requires the most careful attention. NOTE—American doctors will never take Dr. Young as a guide. They could teach him for a decade.

DOUBTING INSANITY.—Dr. A. Tamberini (*Alienist and Neurologist*, January, 1884) says that in this psychosis: 1st. Side by side with a fixed idea which is accompanied by fears more or less distressing, and an overpowering impulsion to certain acts, consciousness of the absurdity of such acts usually remains complete. 2nd. In all there is an almost absolute impotence of the will, not only to control the absurd ideas, but also an irrestrainable tendency to those acts. 3rd. In almost all the cases there was a very conspicuous hereditary predisposition to psychopathic disorders. 4th. Of ten cases, seven were in females, and two in boys, in the period of puberty. The patients in general belonged to the cultivated and respectable class.

TABLESPOON CAPACITY.—The Paris Pharmaceutical Society (*Druggist*) recently resolved that, in place of defining the capacity of a tablespoon, it be proposed to physicians that when they prescribe a tablespoonful, they understand this term as meaning a quantity equal to fifteen grams of distilled water. The size of normal "drop-counter" (comptegoutte) was defined to mean that the diameter of the tube from which the drop falls should measure three millimeters; very volatile liquids should not be measured by drops. It would seem that some action of the kind might be adopted in this country. If the teaspoon and tablespoon are to be retained in medicine as definitions of quantity, it is obvious that some uniformity in capacity should be established. Once established, physicians could readily introduce the use of the regulation spoons either by oral recommendation to their patients, or specification in prescriptions. Dispensing by weight loses its every advantage by the prevailing crude method of administration.

A CASE OF AINHUM.—In *The American Journal of the Medical Scences* for January, 1884, Dr. L. A. Duhring reports a case of ainhum, of which but few have been reported in our country. Its geographical distribution includes chiefly the West Coast of Africa and certain countries in South America, more particularly Bahia, Rio de Janeiro, and Buenos Ayres. As the disease becomes better known, it will, doubtless, be found that it is met with throughout our Southern States, though, probably, as one of the rarer diseases. Appended to the paper is an exhaustive study of the microscopic appearances.

OSTEOTOMY FOR BOW LEGS—Dr. W. H. Carmalt reports, in *The American Journal of the Medical Sciences* for January, 1884, a case of a child of five years in which there was marked outward curvature of the tibiæ and fibulæ of both legs, and in which he divided the bones, under antiseptic precautions, with excellent result.

ON THE TREATMENT OF HAY FEVER AND ALLIED DISORDERS.—In a very valuable paper on this subject in *The American Journal of the Medical Sciences* for January, 1884, Dr. Harrison Allen claims that the means of effecting the cure of this hitherto considered incurable disease is simply to overcome the tendency to obstruction in the nasal chambers.

The symptoms of hay fever are always associated with some degree of obstruction of one or both nasal chambers. A cause of this obstruction is dilatation of the bloodvessels. There is no doubt that the local phenomena are in

most instances the same, and that the multiform related symptoms, such as injection of the eye, headache, malaise, asthma, etc., are due to reflex vasomotor disturbances. But many patients report for treatment who exhibit swelling of the nasal mucous membrane, occlusion of the respiratory passages, and mucoid or semi-purulent discharge, without any of the related reflex phenomena. Yet a third and intermediate group exhibits perhaps a tendency to turgescence of the mucous membrane, together with one or more of the more common constitutional symptoms of typical hay fever. Indeed, there is nothing peculiar to the disease just named save its sharply defined periodicity, particularly in that phase of it where the periods of recurrence happen to coincide with the time of fruitage of certain plants, or the gathering of certain crops. In a small group of cases, where, in addition, other signs and symptoms become prominent which would invalidate the above propositions Dr. Allen is inclined to attribute them to mental impression—in some of the varied phases of hysterical or neurotic excitement.

Or the case may be stated in different language, as follows: In an imperfectly defined group of cases of nasal catarrh a sensation of sudden obstruction of one or both nasal chambers is a conspicuous symptom. This sensation is accompanied by a constant change in the chambers themselves, viz., engorgement of the membranes over the turbinated bones, producing pressure against the septum and occlusion of the respiratory passages of the nose. The sensations are recurrent, but vary greatly as to the time of the day or the season of their return. With some patients they are nocturnal, and are associated with the recumbent position; with others they occur after meals only; with some they occur in the summer season; with others yet again, in the winter. The sensations may be confined to either chamber, or be present in both. In aggravated cases they are associated with numerous reflex symptoms, among which may be mentioned lachrymation and hyperæsthesia of the conjunctiva, headache, and asthma. Patients having a disposition to obstruction during the summer and autumn report themselves as suffering from "hay fever;" while those having alternating attacks in the right and the left chambers report with "nasal catarrh."

The cases so far studied exhibit one feature in common, viz., that the inferior turbinated bones lie well above the plane of the floor of the nasal vestibule. In many persons, not the subjects of "hay fever" and allied disorders, the lower free portion, including, of course, the inferior border of the bone, lies below the plane of the floor of the nasal vestibule; and in ordinary inspection the inferior meatus is out of sight.

It will thus be seen that the mucous membrane, which is known to be the most erectile, is also the most exposed to irritation from extraneous substances, and to changes in the temperature of the surrounding air.

The conclusions to be drawn from the study of the six cases reported by Dr. Allen may be summarized briefly as follows:

1. That the treatment of all conditions of obstruction in the nasal chambers, no matter from what cause arising, can be successfully carried out by destroying the causes of obstruction. If the cause be an overgrowth of bone-tissue, it must be filed, sawed, or drilled away. If it be caused by a deviated cartilaginous portion of the septum, such portion must be re-set in a new place. If, as is often the case, it is due to periodic turgescence of the mucous membrane or the resulting secondary hypertrophies, such growths must be destroyed, either by the galvano-cautery, by the snare, or by caustic acids.

2. That the treatment of hay-fever and allied periodically recurring nasal affections in no way differs from the treatment of other nasal diseases accompanied by obstruction, and that the treatment may be conducted during an attack as well as in the intervals between any two attacks.

ELEPHANTIASIS ARABUM CURED BY LIGATURE OF THE FEMORAL ARTERY.—In view of the fact that the successful operations, both in this country and in Europe, for the cure of this most obstinate disease of the lower extremity, by ligation of the femoral artery, are so few as to be easily counted upon one's fingers' ends, and because of the apparent propriety of resorting to this last method before amputation becomes an imperious necessity to save the life of the patient, the successful case operated upon by Dr. G. C. E. Weber, and reported in the January number of *The American Journal of the Medical Sciences*, has considerable interest. Thirty days after the operation the limb had diminished in circumference nearly one-half, and at the end of six months the patient reported that he suffered no inconvenience whatever from his limb, save that upon unusual exertion a slight œdematous swelling would supervene.

PAGET'S DISEASE OF THE NIPPLE, OR MALIGNANT PAPILLARY DERMATITIS.—Dr. S. Sherwell, in the January number of *The American Journal of the Medical Sciences*, records two cases of this rare affection, the diagnostic evidences of which he summarizes as follows:

1. The subjective symptoms, itching, burning, etc., are those of an eczema, and not those of an ordinary carcinomatous affection, but they are more marked than in an ordinary case of eczema.
2. The objective appearances are like eczema; the discharge is absolutely similar to that of eczema; it stiffens linen, and forms crusts entirely undistinguishable from those of an impetiginous eczema. The color of the surface is, perhaps, occasionally more livid, but the border is not more sharply defined than is common in that trouble; the somewhat elevated appearance of the patch simulates exactly the acutely macerated and swollen conditions of the lower epithelial layers frequently found in eczemas.
3. The disappearance of the nipple, which is spoken of by Mr. Henry Morris as a "melting away."
4. The retraction of the nipple or tissues immediately beneath, if retraction there be, is not to be distinguished as such, as is so easy in ordinary cancer.
5. The "malignant papillary" feature, as described by Thin, is a very diagnostic point, and would of itself instantly resolve any doubts as between Paget's disease and a true eczema.
6. The extreme length of time before the appearance of anything like positive evidence of carcinoma.

IN *The American Journal of the Medical Sciences* for January, 1884, Dr. Thomas G. Morton reports an interesting case of fracture through the anatomical neck of the humerus, with complete separation and dislocation of the head of the bone into the axilla, with its subsequent removal. The line of fracture was directly across the anatomical neck, where some capsular tissue remained attached. The humerus showed considerable absorption, and rounding off at the seat of fracture, but the joint was otherwise uninjured.

BRUSHES or combs used on the heads of persons afflicted with scaly baldness will communicate the disease to other heads, and Dr. O. Lassar considers that baldness is spread by hairdressers who employ combs and brushes on their customers, one after another, without any regular cleansing of these articles after they are used. Hair which fell from heads in which dundruff occurred plentifully were collected and rubbed up with vaseline. The ointment thus made was applied to the fur of rabbits or white mice. Soon baldness made rapid progress in the parts so treated. Vaseline alone produced no effect.

ORIGINAL ABSTRACTS.

(BY J. G. KIERNAN, M.D., CHICAGO, ILL.)

FOREIGN BODIES IN THE EYE.—Leiber (*Arch. fur Ophthal.*, XXVIII.) has found that copper introduced aseptically into the anterior chamber excites purulent inflammation, but only when it is in contact with the iris. This does not occur when it is imbedded in the lens and projects free into the anterior. chamber. If the particle of copper be suspended free in the vitreous, purulent inflammation does not arise; if lodged in the coats of the eye in the ciliary region, there results a circumscribed suppuration in the immediate vicinity of the foreign body. Lead does not give rise to purulent inflammation either in the vitreous or anterior chamber. On the other hand, particles of lead suspended free in the vitreous produce the same form of detachment of the retina as is found in cases where particles of iron or copper have lodged in the eye. Metallic mercury, introduced aseptically, causes violent purulent inflammation, both in the vitreous and anterior chamber, which is to be distinguished from septic inflammation by the fact that it does not extend to the remaining parts of the eye.

EAR COMPLICATIONS OF NASO-PHARYNGEAL DISEASE.—Dr. Beverley Robinson, (*New York Medical Journal*) believes that, in the eruptive fevers in which inflammation of the middle ear so frequently developed, the aural affection is due rather to the nature of the disease than to extension of inflammation from the throat, although when the latter was present the otitis was more likely to occur. Dr. McKenzie, of Baltimore, had excited redness of the drum membrane by irritation of the sensitive point in the nasal passages, and believed that otitis media was sometimes of reflex origin, due to nasal disease.

DEATH AFTER TRACHELORRHAPHY.—Dr. P. F. Mundé (*New York Medica Journal*) relates the following case: Three or four weeks ago a woman entered Mt. Sinai Hospital to be treated for cervical laceration of the uteri, and accompanying cystocele and proctocele. The uterus could be drawn down to the vulval outlet by the slightest traction without producing any pain. The laceration was repaired without the use of an anæsthetic. The patient did not complain of much pain. After the operation the temperature rose to 104° Fahr., but was reduced to 102° by the use of quinine and ice-water applications to the abdomen. Hot carbolized vaginal injections were given. The temperature then ranged from 101° to 103° for ten days. There was an offensive bloody discharge from the vagina. The sutures were not removed until the eighth day, when union was found to be perfect. The temperature remained between 101° and 102° for several days after the removal of the sutures, but the patient's condition was very low; she complained of no pain. Quinine, opium, and stimulants were administered, but death took place about the fourteenth day after the operation. The autopsy showed general peritonitis. There had been no signs of peritonitis before the removal of the stitches, and Dr. Mundé thought the patient must have been suffering from septicæmia. It was probable, in the light of the autopsy, that there must have been a gradual development of peritonitis from the uterine envelopes upward until it became general.

MARSHMALLOW IN PALMAR PSORIASIS.—Dr. F. C. Berry *(Practitioner)* states after trying in vain to relieve a typical case of psoriasis in a 65 year-old man, who had suffered from it for eighteen months, by the use of Fowler's solution internally,

and the local application of soft soap, and an ointment of chrysophanic acid and vaselin, oil of cade and vaselin, the ammoniated mercury ointment, and Wright's liquor carbonis detergens, he applied marshmallow ointment. The intolerable itching and consequent irritation were relieved by the first application, and in a month the skin of the hand had almost regained its natural appearance. No other treatment was used except the washings with soft soap. The disease re-appeared in a short time, but fresh application of the ointment cured it at once. There was no history of syphilis. In the palm of the right hand the integument was hardened and thick, and from off its surface glistening white scales could easily be removed. In some places it was corrugated and fissured. Extension of the fingers caused the cracks to bleed. The thumb dorsal surface was also affected. The ointment was made by cutting the fresh leaves into small pieces, stirring them together with lard and boiling the mixture for half an hour, after which process it is strained through muslin or through a common kitchen strainer, and is then ready for use. It is by no means improbable that Dr. Berry's ill success with chrysophanic acid was due to the use of vaselin.

Diphtheritic Ophthalmia and its Treatment.—Barette (*Arch d'Ophtalmologie*, March-April, 1882) calls attention to two complications not previously mentioned—loss of the eyelashes and lid paralysis. In the patients examined the ciliary bulbs were so altered by the disease that most of the cilia were lost, and were not reproduced. The treatment consisted in exciting in the mucous membrane a state of inflammatory congestion favorable to elimination of neoplastic products and production of healthy pus, and then treating this purulent imflammation by means in use false membranes are removed. He uses also antiseptic lotions and hot fomentations. As an antiseptic lotion he employs either Labarraque's solution, or a five per cent. solution of carbolic acid.

Chromic Acid in Nasal Polypi.—D. F. Donaldson (*New York Medical Journal*) says that the point to be aimed at in the treatment of polypi of the nasal passages was prompt and rapid removal, with a minimum degree of pain and loss of blood, and in a manner to prevent their recurrence. The conditions before mentioned were best fulfilled by an application of fine crystals of chromic acid, or of a solution of a hundred grains to the ounce, first moistening the mucous membrane with a lead lotion. Chromic acid was a most powerful escharotic, and also disinfectant. When instruments were used, it was of advantage first to apply the acid to the base of the growth and lessen the size of the pedicle; or afterwards to the stump, destroying it completely. In the discussion of this paper before the American Laryngological Association, Dr. W. C. Jarvis said that usually the development of nasal polypi near the seat of a former operation took place not from the roots of the polypi that had been removed, but from embryonic structure upon the mucous membrane in the immediate neighborhood which now had room for growth. The application of chromic acid after removal of the large tumor by the wire would prevent this. Dr. W. F. Duncan thought that recurrence of the polypus could be guarded against only by removal of a portion of the turbinated bone from which it sprung. In his experience there had been a recurrence in about eighty per cent. of the cases within from one to five years after the growth had been removed by other methods. Dr. Carl Seiler had found that polypi of the gelatinoid variety were a localized hypertrophy of the mucous membrane which had undergone myxomatous degeneration. In their removal he preferred the wire, which, when tightened slowly, gave rise to less pain than did escharotics. A recurrence did not take place if all the growths were removed. Dr. W. H. Daly had used

chromic acid with satisfaction, but he had found one escharotic about as good as another.

Treatment of Serpiginous Cornea Ulcer.—Verdèse believes (*Arch. d'Ophtal.*, March-April, 1882) this form of ulcer originates in an obstruction in the course of the tears, or a simple diminution in the force of the current, which becomes insufficient to carry along with it or to retard septic substances engaged in the inferior orifice of the nasal canal, either spontaneously or by the patient blowing his nose. These septic substances, leptothrix buccalis or aspergillus, penetrate into the lachrymal canals, and, being in an excellent state for cultivation, multiply, and await the proper moment for their necrotic action. The serpiginous form of ulceration is entirely due to the infection by micro-organisms which thus find a nidus of cultivation in altered conditions of the lachrymal canals. In the majority of cases simple lachrymation precedes the corneal complications. These serpiginous germs may infect slight corneal desquamations, possibly produced by obstruction to the course of the tears. He recommends the injection of intact lachrymal puncta with a four per cent. boracic acid solution, as prophylaxis against simple as well as the serpiginous ulcers. When such an ulcer appears, he scrapes roughly its entire surface with a narrow cataract knife, to produce an actual resection of the pultaceous margin, especially on the side where the destructive action is going on. As the necrotic elements are detached, an assistant brushes over the cornea with a salicylic acid and borate of sodium solution, each one gram to ten grams of water. Then the lachrymal punctum is opened, the point of an Anel's syringe introduced, and a series of injections made with a four per cent. boracic acid solution. The conjunctival cul-de-sac is then carefully cleansed with carbolized cotton, and the salicylic acid and sodium borate solution spread over the cornea. The eye is then covered with carbolized cotton. This dressing should be done twice a day. Bowman's operation may be done on the lachrymal passages if advisable.

Cottage Asylums.—Dr. R. S. Dewey, Superintendent of the Hospital for the Insane at Kaukakee, Ill., says (*Alienist and Neurologist*, January, 1884) : Institutions for the insane were at first only founded for public relief and without the idea of benefit to the insane. It has always been a too general impression that the insane were essentially different from the sane in everything; instead of the fact being recognized that they possess natural traits and activities, which are, however, modified through the agency of disease, wrongly directed or held in abeyance ; and this mistake has been very mischievous in its effects upon the provision for them, preventing the supplying of a natural and domestic abode, adapted to the varying severity of different degrees and kinds of insanity. The essential difference between an institution for the insane and all other institutions, in confining and controlling those who are held as prisoners, without being guilty of any offense, and who are entitled to the utmost privileges and consideration of their wants, without possessing in the eye of the law or in the exercise of reason, the ability to enforce their claims, was long overlooked, but has come to be more fully appreciated. Gradually insanity has come to be recognized as a disease, hospitals have been founded, mainly for curative treatment, and the congregate asylum has been developed, admirable for its purpose, but not adapted for universal application to the entire body of the insane. Finally the infinite variations among the insane, in the manifold forms of the disease ; in the degree of reason and self-control possessed by different individuals or characterizing different groups of the insane as a whole; in the various classes of private and pauper, criminal and innocent, epileptic, inebriate, etc., are beginning to be more fully understood by the public and the medical profession, and a variety is being introduced in the erection of buildings, as to

location and internal arrangement, by which an appropriate environment for each and all is sought to be attained, while at the same time the opinion gains ground that the domestic or "segregate," as contrasted with the "congregate" or "institution" idea, should prevail for a large proportion, in providing for them economical and substantial buildings, with as much of the house-like and home-like character as in each instance the fact of insanity would permit.

VASELIN OINTMENTS.—Dr. Kiernan (*Druggist*, December, 1884) says that on testing vaselin ointments on dogs and on himself he is fully prepared to confirm Shoemaker's conclusions. On making a five to thirty vaselin ointment of potassium iodide and rubbing it into his neck and thighs he could not detect either in the urine or saliva any trace of iodine; on repeating this experiment in a dog the same result occurred. The following day these experiments were repeated with a lard ointment, and iodine was to be detected in very decided quantities in the saliva and urine of himself and the same canine. The use of an atropine vaselin ointment had no effect on the pupils of either the canine or himself, while the action of an oleate or lard ointment was very decided. The ordinary blue ointment of the pharmacopœia, well rubbed in, resulted in the finding of mercury in his urine and that of the canine, while the vaselin mercurial ointment had no such effect. The use of a vaselin strychnine ointment had no effect on the canine, while the same quantity of strychnine in a lard ointment produced very decided effects in respect to tetanizing the animal. A mixture of one-third fluid extract of conium and two-thirds vaselin was, when well rubbed in, without effect on the strychnine symptoms, while the same proportions of fluid extract of conium and lard controlled them in a very decided manner. From his own results, Vigier's and Shoemaker's, he concludes that while vaselin and glycerin ointments might be of some value as purely local applications, as in insecticide preparations, such excipients should not be used in cases where the drugs incorporated in the excipient are to be absorbed.

TASTELESS QUININE MIXTURE.—Dr. J. Bartlett (*Chicago Druggist*, Dec., 1883) recommends administering quinine drug to children and fastidious persons in this form: Quinine sulphate, 20 grains; tannin, 6 grains; com. syr. sarsaparilla, 1 ounce. Mix by first triturating together the dry powders, and then adding the syrup. This procedure is considered essential in order better to unite the alkaloid with the tannin.

PARENCHYMATOUS INJECTIONS OF HYPEROSMIC ACID.—In April last M. Winiwarter used injections of hyperosmic acid into the tissues of a soft sarcoma of the size of a child's head, situated in the right side of the neck. Every day for fourteen days the injection was repeated. Each time three drops of an aqueous 1 per cent. solution of the acid was employed. At the end of this time the tumour was completely broken down, and the necrosed pieces mixed with seropus were eliminated by incisions made through the skin, which remained perfectly sound. No local inflammation or general disturbance attended the treatment. Since then the injections have been used with success in a case of sarcoma of the shoulder, in cases of multiple lymphomata, scrofulous glands of the neck, and other kinds of cervical tumours. With carcinomata of the glands, the result has been negative. According to M. Delbastaille, the principal advantage of the acid appears to reside in its property of acting slightly or not at all on healthy tissues, and of confining its action to the sight of injection.

SELECTIONS.

The Annus Medicus 1883.

The year 1883, from a medical point of view, cannot be regarded as a very eventful one, though the sequel will show that it has not been deficient in matters of interest and in work of promise. On a cosmic view the year will be strangely remembered as one of earthquakes and of red sunsets in winter. In this quiet country, where the "shaking fits" of "the old and crazy earth" are not "frequent," we have had several slight reminders that even we are not entirely beyond the reach of that incessant volcanic activity which, in the case of Casimicciola and Krakatoa, has been attended with such appalling and widespread consequences. The seasons have been moderate in character, with results to be noticed as we proceed. Without further delay, and dividing our summary into various sections, we shall briefly indicate the chief points in the history of the year.

ANATOMY AND PHYSIOLOGY.

Amongst the more important new works on anatomy and physiology, or new and greatly modified and extended editions of old works, that have been published during the last year are Hyrtl's "Anatomie," which has long been out of print, but which contains much original matter; Gegenbauer's "Anatomie des Menschen," which treats the subject of human anatomy in the broad and comprehensive spirit to be expected from a great master of comparative anatomy; Langer's "Anatomie der Äusseren Formen," adapted for artists; Wiedersheim's "Vergleichende Anatomie," which is completed by the issue of the second part, dealing with the invertebrata; Gray's "Anatomy," the tenth edition of which has been edited by Mr. Holmes and Mr. Pick; the first three parts of Vogt's "Anatomie Comparée;" the third and concluding part of Ecker's "Anatomie des Frosches," which completes his work on the "Anatomy of the Frog;" Marc See's "Anatomie et Physiologie du Cœur," which especially deals with the disposition and structure of the valves, and it is noticeable that he calls in question, if he does not altogether deny, the safety-valve action of the tricuspid valve, generally admitted in English physiological text-books. Fick has published the third edition of his convenient "Compendium der Physiologie;" Foster the fourth edition of his "Physiology;" whilst a third edition of the well known "Embryology" of Foster and Balfour has been edited by Adam Sedgwick and Walter Heape; a second edition of Landois' "Physiology," one of the best of all the German works, has also lately appeared. Sappey has published a valuable essay on the lymphatic vessels; and Loewe a magnificent quarto on the anatomy and development of the nervous system, illustrated by many drawings; M de Quatrefages has written a treatise with the title, "Hommes Fossiles et Sauvages," which contains many facts bearing on the history of the human race, a subject to which a new dictionary, the "Dictionnaire des Sciences Anthropologiques," is devoted. Moquin-Tandon, the professor of zoölogy at Besançon, has completed a French translation of the well-known "Grundzüge der Zoologie" of Claus, which may be recommended to those who have not mastered German. Hermann's large "Handbuch der Physiologie" has been completed within a reasonable period by the

issue of a part on the chemistry of the secretions, by E. Drechsel, and the six volumes as they now stand constitute the most authoritative, comprehensive, and complete account of physiology that exists in any language, and are fairly comparable with the great "Dictionary of Physiology" published in 1842-43 by Wagner. An important and extremely well got up series of manuals for students of medicine was published at the commencement of the winter session by the Messrs. Cassell, embracing histology, surgical pathology, surgical applied anatomy, clinical chemistry, dissections, human physiology, physical physiology, therapeutics, comparative physiology, and operative surgery, by such distinguished authors as Klein, Pepper, Treves, Ralfe, Power, Bruce Clarke, and others. Some valuable papers have appeared in the *Journal of Physiology*, the most important being those by W. H. Gaskell on the "Innervation of the Heart," with especial reference to the heart of the tortoise, in which the influence of the vagus is especially studied; Dr. Wesley Mills on the "Physiology of Voice;" and Drs. Yeo and Cash on the "Latent Period of Skeletal Muscles." In the *Journal of Anatomy and Physiology* Dr. Fraser gives the results of his experiments on the action of infused beverages on peptic digestion, which deserves careful study on the part of the practitioner. The second and third volumes of the *Archives Italiennes de Biologie* have appeared, and contain important articles by Capparelli, Pellacani, and Sertoli on "Unstriated Muscle"; the first-named observer having shown that the period of latent excitation may be as long as one second and a half, and that this form of muscle undergoes cadaveric rigidity, attaining its maximum in from six to ten hours after death, whilst Pellacani has chiefly occupied himself with the action of curara and other poisons on it. Sertoli notices that it undergoes rhythmical contraction of a spontaneous character, lasting five or six minutes, or more. He finds that temperature is of great importance. Below 15° C. it does not contract at all when stimulated, and it attains its maximum at 37° C. We have only space to mention a few of the numerous essays that have made their appearance in the two great French periodicals, the *Archives de Physiologie* of Brown-Séquard and his coadjutors, Charcot and Vulpian, and the *Journal de l'Anatomie* of Charles Robin and Pouchet; but Schmidt, Hayem, Robin, Mayet, and Vasilio have discussed the structure and reactions of blood-corpuscles; the anatomy, physiology, and pathology of the nervous system have been described and illustrated by Ranvier, Vignal, Dastre and Morat, Dejérine, Beauregard, Hoggan, and Testu, whilst there are many scattered papers of merit. The set of the tide in physiological research is perhaps best indicated by the astonishing number of memoirs, treatises, and papers on embryology. The successive numbers of the *Archiv für Anatomie und Physiologie* contain, for example, those of Strahl on the "Development of Reptilia," Spee and Hensen on the "Development of the Guinea-pig," Froriep on the "Development of the Spinal Column of the Fowl," V. Noorden on the "Development of the Labyrinth in Osseous Fishes," Gottschau on the "Structure and Development of the Adrenals," and many others. The Americans have been unusually active, and many valuable essays and memoirs have appeared. A new journal, named the *Bulletin of the American Museum of Natural History*, has been published at New York. John Mason, of Newport, U. S. A., has published a very fine folio on the Minute Structure of the Central Nervous System of certain Reptiles and Batrachians of America, which is illustrated by no less than 113 plates. The application of the graphic

method of recording movements and of instantaneous photography has so far advanced that Marey has been able to give a precise analysis of the movements of the wings of birds in flight. Nicolaides has followed the course of the vaso-motor nerves in the spinal cord. Louis Olivier finds from experiment with an aeroscope that in Paris a cubic metre of air contains on an average 7,000 spores of cryptograms in December, January and February, 12,000 in May, 35,000 in June, 23,000 in August, 14,000 in October and 8,000 in November, and that the influence of the direction of the wind is of immense importance. An elaborate essay by Béchamp has appeared on microzymes, in which he describes very fully the characters of these minute organisms and their relations to the doctrine of spontaneous generation (against which he pronounces) to histogeny, physiology and pathology, with all of which they are in intimate relation. He holds that the germs of disease, whatever names they may bear, are only microzymes or the organized products of their evolution; that they penetrate into the system by either the respiratory or the gastro-intestinal tract, and that after a time they may cease, by a change in their structure or function, to be active. The statement of Dr. Brown-Séquard that anæsthesia without loss of consciousness can be produced by stimulation of the laryngeal mucous membrane by means of carbonic acid gas, if supported by further experiment and if capable of being applied with safety, may effect a revolution in the exhibition of anæsthetics. Rosenthal has devised a new myograph, with which he has determined the latent stage of contraction of muscle to occupy about ·01 sec., a period that is in close accordance with the time originally given by Helmholtz.

PATHOLOGY.

Not many years ago those pathologists who declared the discovery of micro-organisms in diseased tissues and fluids were listened to with incredulity, if not with impatience. Now all this is changed, and the search for these microscopic parasites is being pursued in every pathological laboratory with more or less success, and their discovery in new fields announced with more or less justification. The labors of Pasteur and Lister, of Koch and Klebs, are bearing fruit; but so eager is the search that the history of pathology is now in great measure fully made up of this branch of inquiry. Koch himself has announced the discovery of a bacillus in the intestinal walls of cholera patients, and he is not a man whose opinion in these matters can be lightly disregarded. But even he has failed to obtain sufficient confirmatory evidence from inoculation; and his inquiry, commenced in Egypt, whither he had been sent by the German government, is to be continued in India. The discovery of the "cholera" had been several times previously announced, Hallier's micrococcus, discovered in 1868, being perhaps the best known. The French scientific expedition organized by Pasteur returned from Egypt with less positive results, but with a decided opinion against the specificity of Koch's bacillus; the expedition, moreover, lost its leader, Dr. Thuillier, who fell a victim to the disease he was investigating. But of all subjects, that which has engaged the widest attention has been tuberculosis. Not a congress meets without its being discussed, and many have been the papers, lectures, and researches upon this topic, which has come to be regarded as the most pressing question of the day. The impetus to this study was given by Koch's now famous discovery of the bacillus tuberculosis—of the existence of which there is a vast preponder-

ance of evidence. This organism has been detected not only in phthisical sputa and tubercular lungs, but in tubercular lesions of all kinds, and in the urine in renal phthisis. In this country the most prominent writers on the subject are Mr. Watson Cheyne—whose report made last spring to the Association for the Promotion of Scientific Research confirmed Koch's experiments entirely—Drs. H. Gibbes, Heron, S. West, Whipham, and C. T. Williams. Others have also contributed to the subject, especially in relation to phthisis; whilst more recently Dr. Gibbes, in conjunction with Mr. J. B. Sutton, communicated to the Pathological Society a paper on so-called tuberculosis of birds, wherein the bacillus was found in abundance. It is impossible to mention the numerous memoirs that have appeared in the continental and American journals on the subject, but it is only right to refer to the vigorous attack made upon Koch's discovery by Spina of Vienna, an attack which was as vigorously repelled by Koch. Even in Vienna opinion is gaining ground in support of the views of Koch. Mention also should be made of the statement by Dr. Wilson Fox that, in face of facts obtained by a repetition of his well-known experiments on the inoculation of tubercle —a repetition conducted at Dr. Fox's request by Dr. Dawson Williams —he admitted the existence of a fallacy in his earlier experiments, which seemed as if indifferent materials could excite tuberculosis in animals. Lastly, as the direct outcome of the bacillary doctrines, we find a belief in the contagiousness of phthisis revived, and to a limited extent supported by the results of an inquiry undertaken by the British Medical Association Collective Investigation Committee. The same subjects are now being more rigidly investigated in Germany. Bacterial pathology does not, however, rest here. This year has seen the discovery of a bacillus in glanders, made simultaneously in France by Bonchance and others, in Germany by Schutz and Lœffler, and later in Russia by Vasilieff, and experimental inoculations have tested the value of this discovery. Neisser's discovery, made in 1879, of a micrococcus in gonorrhœa has been confirmed by Sternberg of San Francisco and Bockart of Wurzburg; whilst Friedlander has lately produced very strong evidence in support of his previous discovery of a specific micrococcus in acute pneumonia, which has also been often sought for by others. Fresh researches have been made on the bacillus of leprosy by Hansen, and in this country by Thin; and Fehleisen has continued his experimental work regarding the micrococcus of erysipelas. Dr. Domingo Freire has announced the discovery of a micrococcus in yellow fever, and Dr. Crooke of a bacterium in scarlet fever. Nor does this exhaust the list, which is attaining very considerable proportions, of diseases alleged, on a more or less sound basis, to be due to the intervention of these minute organisms. Arising out of this subject is the important question of preventive inoculation by means of attenuated virus, which Pasteur has shown can be extended to anthrax and chicken cholera, although Koch, with regrettable animus, published early in the year a lengthy indictment of Pasteur's method. This question of inoculation has lately been ably reviewed by Professor Roy in his Brown lectures at the University of London. Mention may also be made of Falk's important research upon the action of the gastro-intestinal secretions on bacteria. Dr. Creighton, in his address on Pathology at the meeting of the British Medical Association, ably confronted some of the problems which modern pathological discovery has opened up, and dealt with disease from the evolutionist point of view. Turning to other matters, there is but little to record. Not much light was thrown upon the nature of diabetes

in the discussion raised at the Pathological Society upon its morbid anatomy. "Acute rickets" has been shown with convincing force by Dr. T. Barlow to be probably a combination of scurvy with rickets. Dr. Heubner has inquired experimentally into diphtheria, with results tending to show that the affection of the mucous membrane in this disease depends upon catarrh, denying the necessity of catarrhal ulcers, or that the fluid is other than an excessive production of the normal secretion of the mucous membrane. Under the title of "Porencephalie," Professor Kundrat has published a memoir dealing with a peculiar condition of the brain, to which Drs. Savage and Hale White also contributed at the Pathological Society. Ziegler's text-book is approaching completion; Orth has issued a new and revised edition of his compendium, and is engaged in publishing a more detailed work on "Special Pathological Anatomy." Dr. Hamilton of Aberdeen has published an original and suggestive book on the "Pathology of Bronchitis;" Dr Coats, of Glasgow a "Manual of Pathology;" Dr. Sims Woodhead, of Edinburgh, a work on "Practical Pathology." So that both at home and abroad it is safe to say that pathological science is being prosecuted with zeal and with profit.

THE PROGRESS OF THERAPEUTICS.

One progress resembles another in many principal features. In natural progress time plays an important part. The progress of therapeutics is a natural one, no matter what vicissitudes it may have been subjected to. It is natural, because all the agents concerned in its welfare are the processes or the objects of nature. Man, man's mind, and the remedies he makes use of constitute the elements of the machinery of human therapeutics, for we would draw a distinction between human and animal therapeutics. Indeed, it might be well to distinguish between human and animal therapeutics. Pushing the same notion further we might with justice speak of individual therapeutics. Such considerations are suggested when we reflect on the meaning of the term "idiosyncrasy." Taking a retrospect of the past year we can discern no tower projecting its height far above the level of ordinary discovery or progress. And so it behoves us to take humble ground and inquire of the lesser lights which have been lit—and, alas, in many instances burnt out—during the year 1883.

Perhaps the chief matter which has shown itself has been the importance of remedies which may best be called of antiseptic nature. Antiseptic inhalations in cases of pulmonary disease have been much spoken of and a good deal written about in the closing year. We think their use of considerable value in many cases. No doubt the impetus which their employment has received came from the parasitic doctrine of the nature of phthisis. But it is not on that ground we would venture to support their use. In cases of bronchiectasis, where the long-secreted purulent matter is possibly mixed with minute or even larger sloughs, the adoption of the antiseptic treatment not only renders the patient more tolerable to himself and others, but unquestionably in many instances relieves cough, diminishes secretion and conquers fever. And so it undoubtedly is in some cases of phthisis, where gangrenous processes, however minute, or secretions pent up for however long, are apt to be a source of annoyance and danger. A large number of preparations have been either newly introduced or freshly brought to notice. The bulk of these have, perhaps, died out, possibly again to make their

appearance; but a few of these have held a portion of their ground, or at least attracted special attention. Kairin, which is in some way related to the cinchonas, has occupied considerable attention. Favorable reports of its antipyretic action have been forthcoming from chiefly German quarters. The impression left on our minds is that it is hardly likely to supersede the older and better known antipyretics. Whilst we are on the subject of reduction of pyrexia, we may refer to the remarkable prominence given to the treatment of enteric fever by cold water at the Paris Academy of Medicine during the early part of the year. Whatever advantages may have been claimed for that method of treatment, we think we express the general feeling of the great centres of therapeutics in England when we remark that the universal employment of it in all cases is firmly condemned. Moreover, it cannot be too strongly insisted upon that simple pyrexia seldom kills an individual affected with typhoid fever. No doubt the mere increase of body heat is directly harmful, but it is exceedingly probable that the danger lurks much more in the poison of the fever than in the pyrexia itself. Convallaria majalis, or convallamarin, according to the latest accounts of Beverley Robinson, is inferior as a "heart" remedy to digitalis. Nitroglycerine seems to have established itself more firmly in favor for the relief of anginal attacks referred to the heart; and Dr. Matthew Hay has contributed an important paper on the subject. But little use seems to have been made of naphthol in the treatment of cutaneous diseases; tar appears likely to continue its valuable career in the relief of chronic eczema. Jaborandi has been highly spoken of by Dr. Miller Ord and others for the amelioration of that generally progressive disorder, myxœdema. The hypodermic injection of nitrate of pilocarpin to the extent of producing profuse diaphoresis (dose, one-sixteenth, one-eighth, or one-fourth of a grain of the nitrate) has been followed by marked improvement. So far these therapeutical agents have been tried in an empirical fashion. But the scientific clinical physician yearns after a more rational basis in the use of drugs and other remedial agents. The efforts of Drs. Lauder Brunton, Ringer, Murrell, and Sainsbury in England, of Schmiedeberg, Germain Sée, Bochefontaine, Laborde, and others on the continent, to place on a more secure basis the therapeutical action of drugs, deserve commendation. The pages of the *Lancet* are dotted here and there with valuable attempts in these paths. The view that digitalis contracts the bloodvessels may now be regarded as positively proved. A valuable inquiry into the action of quinine on the heart was abstracted in the *Lancet* for February 24. Two papers by Mr. George Padley of Swansea, on the successful treatment of "Pernicious Anæmia by Arsenic," deserve careful perusal and excite hope in regard to a hitherto very intractable disease. It will thus be seen that the year, whilst not fruitful in any extraordinary way, has yet yielded a good crop of useful observations. Whilst we speak thus hopefully of the therapeutical treatment of disease, we cannot conclude without repeating our conviction of the immense importance of the physiological treatment of disease. The maladies of the body are largely concerned with disorders of quantity. Too much or too little play important *roles* in a multitude of ailments. For such complaints the stupendous value of strict and appropriate diet, including under this term everything that is ingested, cannot be too robustly insisted upon.

SURGERY.

The year has not been marked by any very striking advance in sur-

gical knowledge or practice that can be pointed out as certain to make 1883 memorable in surgical annals. This has not been from any lack of earnest surgical work, as our own columns and those of contemporaries in all lands will show. In reference to the ever-pressing question of the treatment of wounds, there is nothing fresh to report. The vigorous discussions of years gone by as to the truth of the septic theory of wound diseases and complications have died out. This and the other great principles of wound healing and wound treatment are daily becoming better and more widely known, and quite recently surgeons who are very far removed from ranging themselves under Sir Joseph Lister's banner have been at pains to explain that they accepted to the full his theories of septicæmia and local septic infection, and of the great mischief wrought by organisms introduced into wounds from without, and that they only differed from him as to the best mode of carrying out what is spoken of as the "antiseptic principle." On the continent Sir Joseph Lister's theories and practice are enthusiastically believed in and adopted, although by many other agents are used than carbolic acid—especially iodoform and corrosive sublimate. Unquestionably the revolution in our notions of the proper treatment of wounds is rapidly spreading and becoming general, and it would seem, as indeed it would be expected, that the younger men are practising aseptic surgery more uniformly, and with greater faith than their seniors. In leaving this subject, the greatest of all in the domain of surgery, and looking to special branches of the art, we have to record a steady advance in professional confidence, in digital exploration of the male bladder through an opening made into the membranous urethra, and removal of non-malignant vesical tumors through a similar opening. Sir Henry Thompson has already accumulated a considerable experience in these operations, and his published results show a most gratifying success; we are not premature, therefore, in speaking of these operations as approved surgical procedures. Abdominal surgery has been steadily progressing. Enterectomy with suture of the ends of the gut has been practised, and is evidently a practicable operation in suitable cases. In Vienna, particularly, excision of the pylorus has been practised repeatedly, but the success attending this very severe operation has not, thus far, been such as to afford hope of its ever securing a recognized position, even for the limited number of cases in which it is practicable. Digital dilatation of the contracted pylorus has been introduced and practised with success at least once. Gastrostomy is now a not unfrequent operation at our hospitals, and has proved itself to be of real service. In operations for cancer the area of tissue removed is often wide, and in many cases the neighboring lymphatic glands are removed, as well as the organ or part primarily affected. Cancer operations are thus becoming more severe, but it appears to be proved that they are more successful in prolonging life and in averting recurrence of the primary disease than formerly. To the surgery of the osseous system the debate on wiring together the fragments of fractured patella is the most important contribution, while Ollier, Royes Bell, Golding Bird, and others have advocated new ways of excising the knee-joint. One of the most recent additions to our surgical knowledge is a statement by Kocher, of the grave constitutional effects resembling those of myxœdema, which follow total extirpation of the thyroid gland. Nerve-stretching having been chosen by Professor Marshall for the subject of the Bradshawe Lecture this year, we have had from him such a review of the *modus operandi* and value of that procedure as is certain to increase the interest already felt in that opera-

tion. There can be no doubt that the tendency of surgery at present is to advance its operative side. Everywhere operations are superseding less satisfactory means of treatment. And in estimating the value and effect of Sir Joseph Lister's work it is necessary not only to regard the reduction of mortality after wounds, and the banishment more or less complete of wound diseases, but also the great increase of the field of operative surgery which his researches and teaching have directly stimulated and effected.

OBSTETRICS AND GYNÆCOLOGY.

In "Obstetric Medicine" Dr. Robert Barnes has discussed the Naegelé obliquity of the fœtal head; Dr. Champneys has contributed a scientific paper on the "Pressure of the Femora," and its influence on the shape of the pelvis; Krukenberg, an exhaustive memoir on the source of the "Liquor Amnii;" and Charpentier, a work on "Midwifery." In gynæcology the year has witnessed the scientific method applied for the first time to "sterility" in the Lettsomian Lectures by Dr. Matthews Duncan; while Vedeler's paper on "Dysmenorrhœa," Wyder's on the "Mucosa Uteri during Menstruation," and Leopold's on "Menstruation and Ovulation," contain matter which will help to place gynæcology on a scientific basis.

OPHTHALMOLOGY.

In ophthalmology, the elevation of Mr. Bowman to a baronetcy has given general satisfaction. The work which Sir William Bowman—if we may designate him by his new title—has accomplished is amongst the best of its kind that has been done; and the lapse of forty years, the employment of microscopes of superior penetration, and the most intense and unremitting efforts on the part of many histologists, have enabled surprisingly slight additions to be made to his account of the structure of muscle and of the kidney, or to his various observations on the anatomy and physiology of the eye. Whatever he has done he has done well, and the distinguished position he has held, both in this country and abroad as a representative of scientific ophthalmic surgery, has rendered the honor conferred upon him a source of warm congratulation to the profession at large. The proceedings of the Ophthalmological Society are of considerable interest. Sir W. Bowman, in resigning the presidential chair after a tenure of three years, in which he has been succeeded by Mr. Hutchinson, has had the liberality to present the society with the sum of a thousand pounds to assist in defraying the expenses of the meetings and the formation of a library. The papers read and the discussions upon them have been of interest, the most important being those of Dr. Gowers on "Eye Symptoms in Diseases of the Spinal Cord," on the "Growth of the Crystalline Lens," by Priestley Smith, and on "Ocular Movements with Vertigo produced by Pressure on a Diseased Ear," by Dr. Hughlings Jackson. Several interesting cases of sympathetic disease have also been reported. A remarkable series of treatises on "Glaucoma and upon Sympathetic Affections of the Eye," has been published by Ludwig Mauthner, in which the ætiology and pathology of these affections are very fully and ably discussed. The first part of what will probably prove a large work, if continued on the same scale, on ophthalmic medicine and surgery, has just appeared by Drs. Galezowski and Daguenet. The present instalment deals with the diseases of the conjunctiva, cornea, sclerotic, and iris. Otto Becker

has made the most important contribution to our knowledge of the anatomy of the eye, in his splendidly illustrated treatise on the healthy and morbid lens, whilst Dr. Robinski has given in a small pamphlet a good account of the methods of investigation that may be adopted with advantage in studying the same organ. Charpentier has written a good paper on the rapidity of reflex actions effected by retinal stimulation. Wöltzke has made some interesting observations on the tension of the globe. He finds that dilatation of the pupil is constantly followed by augmented tension, whilst contraction of the pupil is followed by diminished tension. Hence atropine augments and eserine diminishes tension; but he has determined the noteworthy fact that eserine in larger doses than those which were just sufficient to produce myosis causes increase of tension. The treatment of the intractable affection named trachoma, or granular conjunctivitis, by means of jequirity, has been brought prominently forward by De Wecker and Deneffe, by Bordet in his graduation thesis, and others. The substance named jequirity by the French is an old friend under a new name—the Abrus precatorius, producing red seeds with a black spot, which, as we learn from Power and Sedgwick's New Sydenham Society's "Lexicon," belongs to the Leguminosæ, and is a native of Java, Mysore, Hindostan, and Assam, where it is used for allaying heat in the eyes in cases of ophthalmia, as well as for other purposes. The effects of the drug have been carefully studied. The conclusions drawn by various observers have been strikingly different. The infusions recommended by De Wecker for use are one in which thirty-two seeds well triturated are infused for a day in 500 grammes of cold water, and then in 500 grammes of hot water; and a second in which ten seeds are infused in 500 grammes of cold water for a day. The application of the cold liquid is made to the inner surface of the lids with a brush three times daily. It sets up acute inflammation, and, according to De Wecker, cures the granulations. M. Bordet declares that none of the patients submitted to its influence have been cured, and he believes it to be in no way superior to sulphate of copper or nitrate of silver. The employment of homatropine has been strongly recommended by Durr as an efficient means of enabling the refraction of the eyes of school children to be taken rapidly with the minimum interference in regard to work. He finds a 5 per cent. solution begins to produce mydriasis in about five minutes; that the maximum dilatation of the pupil is accomplished in from fifteen to twenty minutes; that the degree of greatest dilatation lasts for three or four hours, and that all effect of the drug has passed away in about twenty-four hours. The proportion of cases of astigmatism to healthy eyes seems, from the observations of Nordensen, to be greater than is usually thought. In 452 eyes examined by him in Paris, only 9.2 per cent. were free from any appreciable degree of this defect; 77.2 per cent. possessed corneæ the curve of which was least in the horizontal direction, 1.3 per cent. in the vertical, and the remainder in oblique directions.—*Lancet.*

PROSTATIC GOUT. By REGINALD HARRISON, F.R.C.S, Surgeon to the Liverpool Royal Infirmary.

I propose offering some observations on an inflammatory condition of the prostate which, though never, I believe, terminating in abscess, is attended with much suffering, and not unfrequently leads to further consequences. Though this gland is not so often selected for acute

gouty manifestations as the ball of the great toe and the vicinity of some of the smaller joints, yet cases are sufficiently common to make the subject deserving of comment, and particularly in reference to one or two points. Gouty prostatitis, so far as I have observed it, occurs in persons who, though having a gouty diathesis, either hereditary or acquired, have previously remained free from the more ordinary attacks of this disorder. Its occurrence is often assigned to catching cold, getting wet, or sitting upon damp seats. Like gout acutely affecting the great toe, the attack usually comes on at night, the patient experiencing severe pain, which he refers to the perinæum, and not unfrequently likens to a hot cork. Though painful, the desire to micturate is irresistible, and is accompanied with spasms, which often render any attempt to retain urine, even while the patient is getting out of bed, almost impossible. Sympathetic pain is at the same time experienced in the groin, or in one or both testicles, rendering the latter extremely sensitive to the touch. Exploration of the rectum with the finger—a necessary examination, which is sometimes so painful as to call for an anæsthetic—shows the prostate to be both tense and tender. During the day the symptoms generally abate, to recur at night. Like the analogous manifestation in the great toe, these acute prostatic attacks are not usually of long duration, as they merge into a chronic form, which will presently be noticed. The urine is loaded with lithates, and is invariably of an acid and irritating character. After an acute attack the prostate is often left excessively sensitive, and this is a point worthy of special consideration. After an acute attack of gout in the foot the limb is tender, and the person is more or less lame. So with the prostate—it remains sensitive, and the patient dreads to call forth sufficient muscular force to completely empty his bladder. In fact, he lets his urine dribble off voluntarily, and retains a portion of it, so as to form a sort of water-bed behind his prostate. In this way he wards off from his sensitive gland the last and most painful efforts of each act of micturition. Watch a patient, with a prostate tender from gout, pass water, and the manner in which he cautiously eases off the pressure as the act is about to close is very significant. I have satisfied myself on several occasions that a degree of retention was thus caused, by passing a rubber catheter and removing an ounce or so of urine, when it was believed by the patient that he had emptied his bladder.

It is generally conceded that a hypertrophied prostate, which causes urine to be constantly retained within the bladder, is a condition favoring the formation of stone. I have thus endeavored to show that the urine of the gouty is not unfrequently submitted to similar conditions, but under different circumstances. May not this consideration explain why the inorganic elements of the urine of one gouty person concrete, whilst in another they do not? Is the shortness and dilatability of the female urethra sufficient to explain the rarity of stone in women, even in those of a markedly gouty diathesis?

In the treatment of acute prostatic gout there are one or two points to which prominence is to be given. In the first place it is always associated with a highly acid condition of the urine, and with an excess of urates as well as of uric acid. The administration of alkalies under these circumstances can hardly be regarded other than as a natural expedient. It has been stated that the neutralization of these urine salts by the alkali is little else than masking the disorder, as the cause of it still remains untouched. But there is a mechanical aspect to this question which must not be passed by entirely without notice. One effect

of the administration of alkalies upon such urine is not only attended with a marked disappearance of the urate salts from the urine, but careful microscopical observation has shown that the use of alkalies is frequently followed by a change in crystalline form, which is of considerable advantage to the patient, though he may still continue to void urates. When the degree of vesical and urethral irritation was intense, I have seen all this disappear coincident with a change in the crystalline form, being brought about by some artificial means. It is interesting to notice the relation the mucus that is deposited in the urine holds to the kind and quantity of the crystalline forms existing in health as well as in disease in this excretion. Some crystals of uric-acid salts, for example, excite an immense discharge of this mucus. Such salts seem to act upon the urinary apparatus much in the same way as a foreign body in the eye stimulates a flow of the natural secretion, and renders it inordinate so long as the irritant remains there. Can it be doubted that the means we possess of influencing the urinary mucus through changes in the urine salts we are capable of artificially effecting are not important ones in relation to the subject of stone formation? Does not such a consideration take us one step further back in treating calculous disorders, or the tendency thereto, by bringing them distinctly within the scope of medicines rather than of machines?

The chronic form of the disorder, where the prostate remains tender for a considerable period, or until it is relieved by treatment, requires careful consideration, as it is a far more frequent cause of residual urine than is generally supposed. Occurring, as it often does, at a period of life when hypertrophy of the gland usually takes place, the demonstration by the catheter that the bladder does not empty itself is a circumstance which is sometimes received and acted upon as conclusive evidence that the time has arrived when what Sir Andrew Clark has aptly spoken of as "the catheter life" should commence. There is this important difference, however, between the residual urine of a sacculated bladder in connection with a large prostate and that dependent on a gland which is sensitive and merely temporarily enlarged; the former is benefited by catheterism, the latter is aggravated by it. The former is comparatively uninfluenced by medicines, whilst the gouty prostate which interferes with the complete emptying of the bladder is speedily relieved by those measures which belong to the department of the physician rather than of the surgeon. Where the urine is rendered alkaline in the bladder by circumstances which bring about its decomposition, it is not difficult to understand how a phosphatic stone may be the result. In the view I have urged, relating to another reason for residual urine, is to be found a vesical cause for the collection and aggregation of those materials which the urine of the gouty furnish. It has been observed by Dr. Ord. "Two-thirds of all urinary calculi are in bulk composed of or start from concretions of uric acid."

The symptoms of chronic gouty prostatitis are often anomalous and difficult to sum up; they may be briefly enumerated as urine habitually loaded with uric acid and urates, unnatural sensitiveness of the prostate to the touch, or even to pressure applied to the perineal region, and the presence of uncomfortable sensations referred to the neck of the bladder, as if there was a swelling, or the viscus was not emptied, the latter sensation being practically well founded. The treatment of the affection resolves itself into the employment of those general measures appropriate to the gouty diathesis, which it is not necessary for me to

refer to. Iodide of potassium internally, and a mild form of counter-irritation to the perineum, will often be found very advantageous in removing prostatic tenderness. Lastly, this is a class of disorders which is often largely benefited by some spas where the diathesis is corrected by suitable diet and waters. In our own country I have found Buxton of very great service; whilst abroad there are many watering-places which such persons may visit with advantage. It is not always easy to recommend suitable drinks for these cases. I have found the Giesshuebler Sauerbrunnen a very pleasant beverage; as imported into this country I can endorse Dr. Kraus' recommendation of it as "a very pleasant and refreshing drink, which invigorates the nervous system, removes acidity of the stomach, gently stimulates the action of the bowels, and causes a copious flow of urine, thus combining the qualities of a good drinking water with those of a mild curative agent." It mixes well with red wine.—*Lancet.*

On Supravaginal Hysterectomy, with Remarks on the Principle of the Extra-Peritoneal Method of Treating the Pedicle. By Thomas Keith, M.D., F.R.C.S.Ed., Surgeon for Ovarian Disease to the Edinburgh Royal Infirmary.

The natural history of the ordinary uterine fibroid is different from that of other tumors. It has a limited life. Other morbid growths go on, and vex or kill according to their nature or place in the body. A stone in the bladder, if it be not taken away, is there forever, and as it grows, it torments the more; but, to the woman with a fibroid uterus, who has passed many a weary year in weakness and suffering, middle age brings relief, and old age may be spent in peace. Hence the difficulty in knowing how far we are justified in advising interference for a disease that troubles for a time, though it rarely kills. Till of late years uterine tumors were let lie undisturbed, unless when they were mistaken for ovarian cysts; but the restless surgery of to-day lets nothing alone; it has no patience for the menopause, and would attack all and sundry in some way or other, till one almost begins to think that old-fashioned responsibility has gone out of date. So far as operations for the cure of this disease have yet gone, the mortality is out of all proportion to the benefit received by the few. In the last edition of his book, Sir Spencer Wells gives his results after hysterectomy as follows: 20 deaths in 39 completed operations, or one in every two operated on. In 31 exploratory incisions for fibroid, partial operations or attempts at removal, one out of every six died; while of those who survived the abdominal section, brief notes are given of other eleven cases, fatal mostly within two years, some within one. Mr. Thornton's results, as given at Liverpool in August last, show a mortality from supravaginal hysterectomy almost as high; and, of all operations of "one kind or another" for uterine fibroid, one out of every three died. Professor Schroeder lost 20 out of 66; but, of the last 40, the mortality had diminished to less than one out of every four patients operated on. These are the latest published results with which I am acquainted, and they are of value, because they represent the whole number of operations performed by these surgeons. I believe Dr. Bantock's results are even better for supravaginal hysterectomy, and those of Dr. Hegar are still more favorable. It must not be forgotten, however, that, in many of these operations, the tumors removed were of no great size. Indeed, I know of some that gave no trouble at all. The best of these results

shows an excessive mortality, even if the disease for which the operation was performed were invariably, in time, a fatal one. I cannot accept such a death-rate. Surely surgery can do something better, else hysterectomy should be laid aside.

It was well remarked by Dr. Wallace of Liverpool, at the meeting of the British Medical Association last August, that our opinions on almost everything connected with uterine fibroids and their treatment, are in a chaotic state. We should learn much if the members of the British Medical Association would record their experience in well-marked cases on the following points: What is the natural history of the various forms of uterine tumor when menstruation has passed away? What proportion of cases have been seen to die directly from them, and what are the causes of death? How often do simple fibrous tumors kill from hæmorrhage? On this point there is no exactness. Some maintain that life is almost never in danger from them, and that it is better to let well alone. Then Mr. Thornton tells us that he has removed a large number of ovaries to check the growth of bleeding fibroids, and that he only operates when life is threatened. Some assert that these tumors are rarely fatal from simple hæmorrhage, while Mr. Tait tells us that he has seen many die from this cause alone. Then, details of a large number of operation-cases are much wanted, especially of the failures, for successful cases tell little. A hundred honestly reported cases, such as that given by Dr. Walter of Manchester, in the number of this *Journal* for October 13th, would be of great value. I am often asked what are the best books to read on ovariotomy, and I name first the volume of cases published many years ago by Sir Spencer Wells. It is a record of experience without expression of opinion, and you are left to draw your own conclusions. Such a series of cases of hysterectomy would be as valuable now as these cases of ovariotomy were when given nearly twenty years ago.

For myself, I was slow to begin this operation. Many uterine tumors had passed through my hands. The greater number gave no trouble whatever; a few even disappeared; and many—I may say hundreds—got over the menopause with little disturbance. But some—not a large proportion certainly, and, if I were to make a guess, I would put it at about 5 per cent.—suffered horribly, year after year, and, at the time, death would often have been welcome. Now I sometimes see certain of these old bad cases enjoying a fair amount of health, and able, in every way, to live like other people. Wishing to have the patient's view of the situation, I tell them that nowadays their tumor would be removed, and that, had they lived a little later, much of their former sufferings would have been spared them. The reply has invariably been, "I am so thankful that I had no operation" I never had one in my own practice die from simple hæmorrhage, though many have, at some time or other, seemed to be very near it.

The first operation for the removal of a fibroid tumor done by me was ten years ago. It was a case of rapidly growing fibrous cystic tumor with much solid, and it was mistaken for an ovarian tumor. I had for long expected that this mistake would some day happen to me. It had come to others, and I knew I could not always escape, for the diagnosis is difficult. I was thus not quite unprepared for it. A very thick stump was kept outside, as near as was possible, by Kœberlé's instrument; but, from the distension that came on a few days afterwards, part of the large sloughing mass passed inside the abdomen, fortunately without doing any harm. The second, done a year later, was almost

forced upon me by the patient herself. Her sufferings were great, and long protracted, for suppuration was going on in part of the tumor. She almost died on the table from hæmorrhage a few minutes after the operation was begun. The next one operated on was a nurse, on account of a bleeding fibroid. She could no longer earn her bread, and she had no friends to fall back upon. There was alarming secondary hæmorrhage a week after operation, nearly proving fatal. This accident gave me such a fright, that no more were operated on for three years, when a young woman, twenty-three years of age, was done. She was under observation for two or three years before. The tumor weighed 27 lbs. Menstruation had long ceased, and rapid growth was going on. The left broad ligament enveloped one-half of the tumor, and much enucleation was necessary. Pulse and temperature were high from the first, and the presence of some blood in the urine on the second day was attributed to absorption of carbolic acid. On the fourth night, when all danger seemed to be over, she passed into a state of acute mania; for days she raved without ceasing about her glorified body, till she died nine days after. Under the upper part of the incision, where some of the sutures had given way in her restlessness, was a little matter. In the pelvis all was well, and there was nothing to be seen but the healthy repair of a great injury. The next sixteen cases were successful, and there was a second mistake of a fibrous cystic tumor for an ovarian cyst. Then came the second fatal case, seven days after operation. The local conditions seemed favorable, but the patient was naturally a delicate, feeble woman. She had worked on till she could hardly go on any longer, and the œdematous abdominal wall formed of itself a tumor of the size of an adult head, reaching to the knees. There was no adhesion in front; the tumor moved with the respiration; the condition in the pelvis was satisfactory, and posterior adhesions were never thought of. After a very free incision was made, the tumor would not for some time move forwards. All around appeared a red fringe of very vascular adhesion. One-half of the tumor was embedded in omental intestinal and mesenteric adhesions of such firmness and tenacity that every portion had to be cut. The raw surface on the tumor, which weighed 30 lbs., measured 30 by 31 inches. In addition to all this, there was a curious cystic condition of the mesentery, such as I had never met with before. There were hundreds of small serous cysts, and to get all bleeding stopped amongst these was no easy matter. The adhesions were very bad, but much worse had existed in some of the other cases, and a fatal result, when the patient was placed in bed, was never anticipated. The pulse was rapid from the beginning, yet she took food and stimulants well, never had pain or sickness, and there was no distention. I regretted much that she was not drained, but the case did not seem bad enough for drainage. On the fifth day, two days before she died, I removed three or four ounces of thick syrupy blood from the pelvis. This contained no organism. The cause of death was, however, some form of blood-poison.

With the exception of the cases in which the ovaries were removed to check the growth of bleeding fibroids—and all of these yet operated on have recovered—my list contains every case of uterine tumor with which I have ever interfered by abdominal section. Every operation was completed—some with great difficulty. In two cases, there was a mistake of diagnosis between a fibrous cystic tumor and an ovarian tumor. All the rest were carefully and correctly diagnosed. All were cases of supravaginal hysterectomy. Nearly all were under observation for some

years—some for many years. A gradual deterioration of health had been watched, till the stage of uselessness and utter wretchedness was reached, when death seemed preferable to life. I have never seen such pronounced anæmia as existed in some of these patients; and this of itself certainly does not forbid an operation. The average weight of the tumors—nearly seventeen pounds—shows at least that there was no hurry in interference. All but three of the twenty-four were, from their condition in life, hospital-patients. Their position was laid plainly before them, and they were allowed to decide much for themselves. Some preferred to let bad alone, and these are still working on in more or less discomfort and misery, waiting for the menopause. The argument that life was threatened was never used. I do think that some of the cases had nearly seen the last of their days. Were I anxious for operations, I might ere now have done two or three hundred during the last ten years. Eighteen operations were performed without carbolic-acid spray, with one death. In six done under spray there was one fatal result. He is insane who does not accept, *toto animo*, the antiseptic principle in surgery; but in the surgery of the abdomen I draw the line at the carbolic spray. Some of the operations were extremely trying and difficult to complete in a satisfactory surgical way, or in a way to satisfy one—more especially a few that were half extra-peritoneal and half intra-peritoneal operations.

Most of them were extra-peritoneal, and one was entirely intra-peritoneal. Kœberlé's instrument was at first used, and in the half extra-peritoneal and half intra-peritoneal cases, it is very useful. The broad ligaments were almost always separated off the tumor and tied separately—sometimes left in, sometimes secured outside, according to the circumstances of the case. Great enucleation was often necessary, especially in the large tumors, in order to get the wire placed as low as possible when there was no cervix. The bladder was half a dozen times dissected down. It sometimes rose as high as the umbilicus, and its size was often remarkable. It is not an easy matter to distinguish its edges sometimes, if the ordinary stupid direction be followed, that the bladder be emptied before the operation is begun. Leave it full, and bladder-difficulties are wonderfully modified. One case was so simple, that the operation lasted barely half an hour; three times, the time of the operation was two hours; the average time a little over one hour. When practicable, there is no more convenient plan of extra-peritoneal method than that of the good old clamp, made of a very large size, and, if the parts below be first constricted by one or more wires, there is no difficulty in closing the wound properly round it. The ovaries were more or less enlarged and diseased in every case. In one there was an enormous pysolpinx, the Fallopian tube resembling a piece of dilated intestine seven or eight inches in length.

In five of the twenty-five cases, and these were the cases of small tumors, operation was commenced in the hope that removal of the ovaries would be practicable. It was found impossible to remove them, and even sometimes to get near them; or when got at, one or both were so adherent, that it was safer to go on and remove the whole tumor. This must happen sometimes to others, if it has so often happened to me. The tumors on which I operated were, perhaps, too large, and this drawback may not occur in cases of smaller tumors. I shall not soon forget a scene that happened one afternoon in the hospital. The operation was one for removal of the ovaries for great pain, and to check the growth of a small bleeding fibroid; by that, I mean a tumor not extending much

above the umbilicus. It was late when we began, and both ovaries were felt enlarged on the tumor, about the level of the iliac crests. The right, with an enormously dilated Fallopian tube, and enlarged fimbriated end, was close on the tumor. It was ligatured, with barely room to hold the ligatures. The left ovary felt a little larger; only a small part could be got at. A fine long trocar was put into it, and some thick tarry-like fluid came away; but, instead of a small amount, several ounces filled the aspirator. The incision was enlarged, and the hand got in, but, to do this, some adhesion was separated, and there was surface-bleeding. An elongated cyst, closely fixed to the tumor, was now felt extending beyond the reach of the hand, and dipping down into the pelvis. At last, by separating more adhesion, and causing more bleeding, I was able to feel the distal end of the elongated ovarian cyst. It was pulled upon, and gave way, and, with some force, the whole was stripped off the tumor. It was seven or eight inches in length, along with a dilated tube. The wound filled with blood in the most alarming way. Sponges were packed in, and, after waiting for a time, were withdrawn, when the hæmorrhage went on as much as ever. This process was repeated over and over again. I would now fain have removed the uterus, but this was not practicable, from the way the tumor was fixed in the pelvis, and, indeed, almost everywhere. The wound was more enlarged, and part of the bleeding surface was with difficulty brought into view. Some points were stopped by the thermo-cautery, but, on removing the sponges, blood came as fast as ever. The patient was now quite faint, and it was getting dark. A sponge, soaked in perchloride of iron solution, was pushed down, left for ten minutes, and then slowly withdrawn. A large glass tube was left in, and a few stitches introduced, leaving nearly half the wound open in the centre. As the patient was lifted into bed, blood was again filling the opening. Pressure of cotton-wool and a bandage was then trusted to, as she was now quite pulseless, and more dead than alive. Some hours afterwards, on removing the dressing, there was a flat coagulum under the cotton-wool, extending up to the neck, but the bleeding had ceased. It did not recur. Convalescence was painful and very slow. She is now being trained for a nurse. She is free of pain; menstruation continues regular, and is now quite normal. The tumor is a little smaller.

The health of all these patients since the operation continues to be perfect, and in no case has any harm come from the long cicatrix. In none have I seen any hernia, or anything like an approach to it. The after-comfort of the patient is, therefore, in no way affected by the length of the incision, if proper care be used at the time to close the wound very accurately, and not to allow the patient to be going about too soon. The long convalescence is certainly a drawback to the extra-peritoneal treatment in hysterectomy, and my impression is that we must perfect the intra-peritoneal method if we are to make progress and improvement. This brings me to say a few words about the extra-peritoneal treatment of the stump by the clamp, which, at one time, served us so well, but at which some are now throwing stones. The principle of the extra-peritoneal treatment is a sound one. The mortality attending this method was certainly high in the early days of ovariotomy, but much of this was owing to the late stage in which patients were then brought to us. Thus my results in ovariotomy with the clamp give a mortality of 148 per cent. in nearly 200 cases. In the first 100, from the forty-fifth to the eighty-fifth case, there were only three deaths in forty cases; and, in the notes published at the time, it is stated that the fatal results were not caused

by the way the pedicle was treated. This cannot be called a murderous mortality. The mortality of the silk ligature was much higher, and for the simple reason that we had no Lister to tell us to boil or disinfect our ligatures. We boiled our sponges, put the points of all our forceps through the flame of the spirit-lamp, but we trusted to *pure* silk. The principle of the clamp was not at fault, only we carried it out in an imperfect way. The antiseptic principle was, to a certain extent, clearly understood by Kœberlé, Sir Spencer Wells, and others. Wells' dressing—the chalk and tar bags—was an excellent antiseptic dressing, only the antiseptic element in it was not strong enough. At that time I used iron wire instead of silk, and later on the cautery, and, consequently, did not suffer so much in my results as others who used ordinary silk. I am convinced that, if I were to go back to the clamp in ovariotomy, the results now would be very different, simply because the antiseptic dressing would be different. The extra-peritoneal method seems to be at present the favorite one with British surgeons, and is certainly with us the more successful. I do not see, however, that a fixing of the tenth part of the tissue in the wound in ovariotomy should be condemned, when in a hysterectomy ten times the amount is generally treated in the same way.

Truer words were never uttered than those with which Professor Schroeder began his paper, read at the last meeting of the British Medical Association in Liverpool, in August last. "The prognosis of the removal of large solid tumors of the uterus depends altogether on the development of the technical methods of operating." The removal of a simple pediculated fibroid—an operation rarely, if ever, necessary—must be a simple enough matter, and requires no more surgical skill than is necessary in the removal of a simple serous cyst of the broad ligament—also, as a rule, an unnecessary surgical proceeding. But to take away a large adherent solid fibroid filling the pelvis, and to get the patient well after it, is by no means an easy matter. I do not think that the mortality after supravaginal hysterectomy should be greater than it now is in bad cases of ovariotomy. I fear we cannot look for a mortality of only two or three per cent. as we now do in the removal of ovarian tumors. The results here given show a death rate of eight per cent., or one death in every twelve operated upon, and I am mistaken if this cannot be reduced.

After all, the great difficulty is not in doing these things, but in knowing what are the cases in which we are justified in advising those who trust themselves to us to run the risk of a dangerous operation, with all its attendant miseries. Could we get the mortality down to five per cent. in the bad cases, and these only are the fit subjects, we might then advise interference with a more easy mind. I am not sure if we can so advise, if the mortality cannot be kept down under ten per cent.—*British Medical Journal.*

A Rapidly Fatal Case of Arsenical Poisoning. By David W. Finlay, M.D., B.A., Lecturer on Forensic Medicine in the Middlesex Hospital Medical School, and Assistant Physician to the Hospital.

The following case presents several points of interest, the chief, however, being the rapidity with which a fatal result ensued.

Richard H——, aged fifty-one years, a man in moderate health, although not robust, swallowed by mistake, at 8.30 P.M., on February 27

last, nine drachms of a preparation for softening the skin of the hands, supposed to consist chiefly of glycerine, which was contained in a small flask-shaped spirit bottle. He was seized with a feeling of faintness and collapse, and slight epigastric pain. He was brought without much delay to the Middlesex Hospital, arriving there about 9 o'clock; and it was stated that he had not vomited. His skin was cold, and his face bedewed with clammy sweat; pulse slow and very feeble; respiration shallow; pupils moderately dilated, but acting to light. He presented generally the appearance of collapse, and complained of headache and pain at the epigastrium, with a sense of constriction across the chest. He was quite conscious, and kept spitting to clear his mouth of viscid mucus. An emetic of mustard and water was immediately administered, but did not induce vomiting, and the stomach-pump was then used, the stomach being well washed out. The matter removed from the stomach appeared to consist almost entirely of the mustard and water which had been given as an emetic. Some brandy was then administered, and he was removed to the ward and put to bed between warm blankets, hot bottles being also applied. Notwithstanding, he speedily became pulseless, and although stimulants were freely given, he rapidly sank and died at half-past nine o'clock, one hour after swallowing the fatal dose.

At the post-mortem examination made by Dr. Fowler, the mucous membrane of the larynx was found moderately congested; the trachea was brightly injected throughout, and, with the larger bronchi, contained some very viscid mucus. The lungs were emphysematous and engorged. The right cavities of the heart contained some fluid blood and clots, the left were contracted and nearly empty; the valves and muscular substance were normal, but the endocardium of the left ventricle showed numerous ecchymoses. The liver and kidneys were congested, the spleen normal. The stomach contained about six ounces of turbid fluid, consisting apparently of brandy, mustard in solution, and viscid mucus. The mucous membrane was intensely injected; there were also a very few small ecchymoses, but no erosion of mucous membrane. The duodenum and jejunum contained pale pultaceous matter; the contents of the ileum and colon were brown and semi-solid. The bladder was contracted. It was, of course, sufficiently obvious that death was due to poison, but there seemed nothing either in the symptoms or post-mortem appearances to point conclusively to the particular poison, and hence at the inquest which was held an analysis of the stomach and its contents was ordered. This resulted in the detection of arsenious acid in large quantity, both in the matter removed from the stomach at the post-mortem examination, in the tissues themselves, and in the small quantity of fluid left in the bottle from which the unfortunate man had swallowed the poison.

What remained of the latter, together with the quantity which the bottle was known to contain by a mark left on it in consequence of the length of time the solution had remained in it undisturbed, supplied data for an estimation of the quantity of the fatal dose. The former, amounting to half a drachm, converted into sulphide was found to represent exactly a decigramme, or rather more than one grain and a half of arsenious acid, and the total quantity of liquid in the bottle, being nine drachms, would equal twenty-seven grains and three-quarters. Deducting from this total the quantity left in the bottle, the conclusion is reached that upwards of twenty-six grains had been swallowed. The fatal period is one of the shortest on record, indeed I am aware of only one instance

in which a more rapidly fatal result ensued. This occurred in the case of a youth, aged seventeen, who was stated to have died within twenty minutes after a large dose, the symptoms being of a tetanic character. Reference is made to it in Taylor's "Principles and Practice of Medical Jurisprudence," Vol. I., page 256, second edition, but details are wanting. In the present case the largeness of the dose, its state in solution, and the comparatively empty condition of the stomach, all of which would favor rapid absorption, sufficiently account for the speedy death. The same considerations also account for the somewhat abnormal character of the symptoms, those referable to the stomach being slightly marked, while collapse was profound and conspicuous. Such cases lend support to the opinions expressed by M. Vryens, whose experiments and the conclusions drawn therefrom are set forth in the "Archives de Physiologie," Vol. VIII., 1881. The latter are to the effect that the fundamental character of arsenical poisoning consists in a perversion of the entire nervous system, and that the pneumogastric, sympathetic, and vaso-motor nerves especially are paralyzed or reduced to a state of paresis.

On Bandaging the Infant.—In his retiring address, Captain Douglas Galton, President of the British Sanitary Institute, delivered a philippic against the baby-bandage. He condemned what he described as "those mischievous two yards of calico," which, wound round the middle of so many infants on their introduction into the world, as a sort of baptism to the numerous evils of fashion in dress to which they were admitted, constricted and hindered the expansion of that very region of the body where heart and lungs, stomach and liver, organs of no mean importance, were struggling for room to grow and do their work, and where natural mechanical conditions threw some difficulty in the way of full development. The expansion of the lower part of the chest, which was so pronounced a feature in the well-formed human figure, was attained chiefly in higher animals, and, like most of such higher prerogatives, was the result of more than ordinary effort, and was, proportionately, liable to suffer from interference. The chief effort to accomplish it was made soon after birth, when breathing and foodtaking, and the various changes incidental upon them began; and at this very juncture the opportunity was taken by meddlesome hands to hinder the expansion of the region where these new processes, upon which the well-being of the whole fabric depended, had to be initiated and carried out. A more pernicious device could scarcely be conceived than this relic of antiquated nursedom; and it was impossible to estimate the number of deformed or pigeon chests, of hampered stomachs, livers, lungs, and hearts, with their varied attendant life-induring infirmities and curtailment of life, that must result from the use of these "swathers," as they were called, for which there was not the slightest necessity. The oft-condemned tight waistbanding and lacing of after years, which affected only the small fashionable section of one-half of the community, was not, even in those who were subjected to it, so mischievous as this concealed semi-strangling process which was diligently carried out in the case of a large proportion of infants of all classes. Of the three demands of the infantile period—liberty of movement, fresh air, and good food—it seemed strange that the first two should be limited by smothering bed-clothes, swathers, long petticoats, and other devices, together with imperfect ventilation of rooms, while the last was liable to be supplied sometimes in sufficient quantity and bad quality, but often, whether good or bad, in superabundance.

ORIGINAL CORRESPONDENCE.

DEAR SIR: In No. 18, Vol. XLI., of the Philadelphia *Medical News*, appears an editorial on clinical obstetrics, in which curious practice is advocated. The learned writer does indeed admit that "there may be circumstances under which such a procedure would be manifestly improper." Precisely what those conditions are we are not privileged to know, but presume one obvious one would be the woman's relation to the author, for it would be clearly "improper" thus to treat his mother, sister or wife. Another class which we infer from the article should be exempted are those whose purses have been so filled (no matter how) as to enable them to pay the fee of a decent and respectable physician. With one curl of the lip and one dignified sneer at "exposure" and "humiliation," he strikes from the question the possibility of pauper modesty. We have seen patients whose misfortunes have thrown them upon the charity of the world, and we have seen those whom a life of degradation has brought to the same straits; but we have yet to see the first human female, sober and sane, in whom there was not a fundamental principle of feminine modesty, to be crushed only by external "circumstances." In order to render the editorial "exhaustive," we are referred to the "great benefits to the community" resulting from the practice, without however deigning to favor us with a single example, and we think it would be quite safe to challenge the editor, or any teacher of obstetrics, to name one. There is no doubt that the practice will bring students to our "colleges and hospitals in thousands." Wonderful argument. So did the exhibition of "living artists" bring to the theatres of New York in 1848-9 thousands who were anxious to perfect their tastes in the fine arts, especially that of sculpture.

What are the facts? Most obstetric instruments are intrapelvic in their use and before reaching the scene of their work are entirely out of sight both to operator and looker-on, and the "light" is of no earthly use to any mortal in the case. But a properly constructed model or machine will enable a teacher to exhibit to his class the introduction and application of the instrument to the fœtus, and every stage in its use.

Nor are the evils of this pimpish practice confined to the clinique, nor yet to their pauper victims; but the thousands who are thus induced to rush to such schools and hospitals scattered through the country find it easier to imitate the vices than the skill of their teachers, and practice their modern instructions upon lady patients who are as far from "pauperism," or low "moral tone" as are the friends of the editor, and that, too, in the simplest cases of instrumental or natural labor or miscarriage, referring in justification of their conduct to the modern principle that science and suffering humanity are sexless. These are no fancied sketches of the vicious results of such teachings, but to our knowledge are truthful portraitures of the "evil egg of an evil crow." Had we no regard for the feelings of our patients, it seems to us some regard should be had for decency in *our mother's son.*

Truly Yours,

G. A. WILBUR, M.D.

Skowhegan, Maine, January, 1884.

PROCEEDINGS OF SOCIETIES.

[NOTE.—The weekly medical journals very properly publish the proceedings of societies as soon as the societies adjourn. This journal being a monthly cannot, of course, do this; it will publish, therefore, only such carefully obtained proceedings of American and European societies as are most interesting and instructive.—ED.]

MEDICAL SOCIETY OF LONDON.

THE ordinary meeting of this society was held on Monday, December 17th; Sir Joseph Fayrer, F.R.S., president, in the chair. The evening was the occasion of a characteristic and able address by Sir Andrew Clark, Bart., followed by an interesting discussion, in which Sir Henry Thompson, Mr. Savory, and others took part. After the official adjournment of the meeting, the chief battles were fought over again, so to speak, *en famille*, in which all the principal combatants joined issue.

Sir Andrew Clark read the following paper on

CATHETER FEVER.

GENTLEMEN: Somewhere about the year 1850 one of the medical officers of Haslar Hospital, between fifty and sixty years of age, of nervous constitution, but apparently robust in health, requested me to examine his urine. Accordingly I submitted it to as careful an examination as I was then competent to make, and all that I could find against it was that it was too great in quantity, too low in density, and too pale in color. He then informed me that he had trouble with his bladder, that he meant to consult Sir Benjamin Brodie, and that he wished me to accompany him for that purpose to London. Sir Benjamin examined his patient, drew off a large quantity of urine from the bladder, told him he was suffering from simple enlargement of the prostate, prescribed the regular use of the catheter, and with a few general cautions against a careless diet and exposure to cold, he quickly but kindly dismissed us both. We returned to Haslar. In about a week the patient was free from local discomfort, and without complaint of his general health; but then he began to feel and to look ill. He complained of malaise and weakness and general pains. He lost his appetite, was tormented by thirst, had nausea, became feverish, took to his bed, got daily worse, and, notwithstanding the efforts of his colleagues, who could not agree as to the nature of his malady, he died in about three weeks from the beginning of his illness. No post-mortem examination was made or allowed. The case, here so imperfectly narrated, made upon my mind an impression which has never been effaced; but until about the year 1865 I saw no other case exactly resembling it. In that year I was summoned by Mr. Peter Marshall to visit a gentleman suffering from fever. Certainly he was in what is called vaguely by our elder brethren a typhoid state. He was between fifty and sixty years of age. He was lying on his back in bed, apparently in a state of great prostration. The face was faintly yellowish and mottled, the lips dry, the pupils dilated, and the breath fetid. The tongue was small, brownish-red, dry, tremulous. There was complete anorexia. The bowels had been imperfectly relieved. The urine, habitually removed by the catheter, was low in density, acid, deposited on standing a little muco-pus, and containing a small quantity of albumen. The heart's action was quick and frequent; the pulse small and compressible. The bases of both lungs were congested. The skin, subicteric and for the most part rough and dry, was here and there, chiefly about the hands and feet, bedewed with watery sweat. The acuteness of all the special senses was blunted; and the patient, dull, heavy and indifferent, could yet be roused

to speak and answer clearly questions put to him. The temperature of the body at the time of the examination in the afternoon was 103°. The history of this case resembled that of the case first narrated, and first seen by me. The patient, supposed to be healthy, but suffering from an affection of the bladder, was, a few weeks before my visit, enjoined the daily use of the catheter, did well for about a week, then became ill, and fell suddenly into the condition in which I saw him. Neither Mr. Marshall nor I ventured to form a definite diagnosis of the nature of the patient's malady; but remembering the case at Haslar, I suggested that the fever, which we agreed was not a specific fever, had originated out of the condition begotten by the entrance upon catheter life. I saw the patient only once. The remedies proposed—the food, the alcohol, the quinine, and the aperients—were all of no use to the patient, and he died within a week of our consultation. With great difficulty permission was obtained to make a post-mortem examination, and although it was made with both care and interest (for I was interested in the matter), nothing definite was found outside the bladder, and nothing in it sufficient to necessitate or account for death. The prostate was enlarged, the bladder was dilated and thickened—viewed from the inside it was trabecular and slightly saccular—the mucous lining congested and in part eroded, and everywhere coated with a grayish-white, stinking mucus. There was nothing to be detected in the urethra or kidneys, although they were examined carefully. I was accustomed to such examinations, and neither Mr. Marshall nor I could say anything better of the cause of death than that it was due to irritative fever.

The study of this case gave birth to the opinion, now in my mind a confirmed belief, that the entrance upon catheter life occasionally gives rise to a pernicious fever which, in the majority of instances, destroys life, and sometimes, without the intervention of any sensible structural change, is sufficient to account for death. Since 1866 every year has added to my experience of such cases, and for over ten years at least I have been in the habit of mentioning such cases to surgeons with whom I have had the privilege of consulting. From Sir James Paget, and especially from Sir Henry Thompson, whom I have often met in such cases, I have received at various times much important information; but as I have received from neither of these distinguished surgeons explanations completely in harmony with my own experience and thought of such cases as the one just narrated, and as further information might be now in their possession, or in the possession of others, I ventured, upon a recent occasion at the Clinical Society, to mention the subject in the way in which it has occupied my thoughts, and to invite from my surgical contemporaries their latest experiences and conclusions concerning it. The constitution of the Clinical Society did not permit abstract questions of this kind to be discussed; therefore, at the request of several persons, I have brought it before you to-night. My remarks finding a place in the medical journals, and being by them widely disseminated, have elicited from practical surgeons in all parts a variety of interesting and instructive communications concerning the nature and causes of the fever which occasionally follows casual or habitual catheterisation. Nevertheless, as the exact character of those remarks which I made has been, doubtless by my own fault, misapprehended, and as the subject is of such importance as not only to justify but to require that statements made respecting it should be accurate and clear, I gladly, as I have said, comply with the request made to me from various quarters to reopen the subject.

Now, it is not my intention on the present occasion to narrate a series of cases, and to build thereon a dissertation upon what, for the sake of provisional convenience, I have called catheter fever. I have not, indeed, at my command the materials necessary for such an undertaking, and if I had, devoid as I feel myself to be of the enlightenment and strength which flow out of the surgical

instincts begotten by long surgical experience, I would not attempt it. I have seen many cases of catheter fever, but I have never had charge of one. I have visited my cases only occasionally, and in consultation with other practitioners, and almost always my colleagues have been too busy to keep and to furnish me with minute and continuous records. Indeed, from the present temper of the public mind, the fear which patients have of being made the subjects of experiment, and the demands so thoughtlessly and even cruelly made upon a practitioner's time, it has become increasingly difficult to keep clinical records of any case for oneself; and the public, in what I must call its vicious stupidity, is thus hindering us from helping it so well as we might otherwise have the power to do. But although my records of individual cases of catheter fever are thus, from the necessity of the case, incomplete, I venture to think that, both by the study of their salient characteristics and by the questioning of those in charge of them, I have learned at least enough of their nature and importance to justify me in making certain propositions and in asking certain questions concerning them. The statements which I purpose making about this catheter fever will be most conveniently embodied in a short series of propositions. But before submitting them to your consideration and criticism, it will be necessary, in order to obtain a clear and comprehensive understanding of the underlying subject, to discover the origin and to follow the historical development of those ideas which have shaped the theories of surgeons and determined their lines of practice. I have placed here a table, which I regret to say is imperfect. It is a table prepared by my assistant, Dr. Delépine, who has devoted to it most careful study and conscientious care, and it has, on account of the deficiency of indices to books, occupied an amount of time and caused a degree of labor which you can scarcely imagine. I shall have it, for further purposes, completed; in the meantime it will enable those who do not follow me closely in reading to determine for themselves the order and development of the ideas which have been promulgated concerning this subject. I shall not, in my retrospect, follow as minutely as is here followed the development of these ideas, but I shall take the leading ideas, for by holding to these leading ideas alone I think we shall be able to survey the whole field. (Table omitted: not necessary.)

In 1800 it was known, but not distinctly expressed, that surgical interference with the urethra and bladder was sometimes and in certain circumstances followed by an irritative fever. It was not, however, until 1810 that Moffait, as quoted by Velpeau, described a case of chronic stricture of the urethra, in which simple catheterism was followed by rigors, irregular fever, purulent arthritis (as it is called in France) and death. In 1832 ideas concerning the causal relationship of catheterism to consecutive fever first found form and expression in the writings and teachings of Brodie and Velpeau, and perhaps of Civiale. Brodie distinctly, and even emphatically, mentions the dangers of catheterism, and describes, as occasionally occurring in consequence of it, paroxysms of irregular fever like ague, and leading sometimes to prolonged debility, sometimes to continued fever with rheumatic pains, and sometimes even to mania. He further says that in such cases death may follow, but he cites no case of its actual occurrence. Velpeau enters much more minutely into the nature and relations of fever thus mentioned, and contributes several new ideas to the further development of the subject. He alleges that in some persons perfectly healthy, not exposed to the influence of malaria, even easy catheterism may develop a consecutive and continuous fever, and that this fever has five varieties. In the first it consists of a single paroxysm of fever, ending in malaise and debility, with recovery in a few days. The second consists of recurring paroxysms of fever issuing in continued fever, and oftentimes fatal. The third consists of an inflammatory fever arising out of nephritis, phlebitis, or other local inflammation. The fourth consists of fever associated with purulent arthritis. The

fifth consists of a rapid succession of violent paroxysms of fever, speedily ending in collapse and in death. Velpeau then points out, and very clearly, that in the second and fifth varieties he has never found present at the autopsies any adequate structural cause of death, and in these cases he is disposed to regard the origin of the fever as caused by the absorption of vitiated urinary constituents. But on this, and indeed on similar points of pathogenesis, he is both obscure and vague. Civiale, whose great work is disfigured by passionate claims of priority in this matter (of which claims he furnishes no proof), and by the satirical invective which he launches against the juster and greater Velpeau, gives a full and admirable description of this catheter fever; but whilst admitting that the fever is due sometimes to the urethra and sometimes to the bladder, and contending that the fever of the one differs essentially from the fever of the other, he almost angrily minimises the effects of surgical interference; and, it would seem as if with a judgment disturbed by emotion, contends that in most cases the fever has existed before the use of the catheter, or that it is due to nephritis. (I owe to Dr. Matthews Duncan my best thanks for a letter in which he tells me that he himself has listened to Velpeau setting forth the characters of this very catheter fever to which I am calling attention.) But in a latter part of Civiale's work, marked by greater sobriety of language and a more judicial tone of argument, he distinctly qualifies these strong assertions, changes his point of view, and says that the cause of the fever is vague and uncertain, and that in speaking of its nature we can only guess. In 1858 M. Philips contributed some further ideas concerning the conditions under which this fever is developed. Describing the fever, and in the main following the classification proposed by Velpeau (who, it may be remarked, is the source whence almost all subsequent writers have derived their inspiration, and sometimes their ideas, without acknowledgment), he asserts first that the simplest as well as the severest catheterism, with the largest or the smallest instrument, may originate the fever; secondly (and this is the most important contribution, if it is a true one, which he has made), that the affection of the urinary passage lies behind the bulb, the fever does not follow; and third, that the predisposition to the fever does not lie in the state of the nervous system at all, but in the existence of certain diatheses and in chronic disorders of the general health.

In 1859 Marx, in a monograph of remarkable merit, reviews the state of the question at his time, and contributes to its elucidation and development certain important facts and ideas expressed with great clearness, and used with judicial ability. He adopts a classification of the varieties of catheter fever similar to that given by Velpeau, recognizes uncomplicated cases issuing in death without any discernible structural lesion outside the bladder, quoting eight or nine that occurred in his own experience; asserts that it may occur in persons of perfect health, and that in them, as well as in others not healthy, it may follow upon any state of the urinary organs requiring the passage of a catheter; and finally, he declares with emphasis the fever to be positively uræmic, and ascribes its origin to insufficiency of the kidneys arising out of functional or structural disease. In this work perhaps for the first time the casual relationship of catheterism to catheter fever is most clearly and comprehensibly set forth, and a logical, coherent, and ingenious, if not accurate, theory of the genesis of the fever is propounded. In 1867 the practical, and, indeed, also in some respects the theoretical aspects of this subject were most greatly advanced by the publication of the now classical work of Sir Henry Thompson on the urinary organs. In this work characterized by great force, method, clearness, precision, and knowledge, he mentions the perils of catheterism, gives instructions for averting them, notices the occurrence, in a few exceptional cases, of a low, irritative fever, and quotes Sir Benjamin Brodie to show that

in a few weeks it might terminate in death. Furthermore, he says (and here he differs from almost every one of his predecessors in this line of inquiry) that in all such cases there will be found old-standing pyelitis, with dilatation and marked degeneration of the renal structures, and that in no circumstances could such patients long survive. Looking at the unrivaled experience of this distinguished surgeon, and remembering how often I myself have consulted with him about cases such as this I am now considering, I confess to a feeling of disappointment that he has not made time to give to the profession a more serious and adequate account of this important matter, which he must know better than almost any one else. In 1867 the distinguished president of this society, Sir Joseph Fayrer, gave an admirable account of the varieties of catheter fever, declared, if I understand him aright, that the predisposition to it lay in the malarious state and its consequences, or else in incipient or advanced disease of the kidneys or other parts of the urinary tract; that it began (and from him we have for the first time a clear and express statement on this point) in reflex disorder of the nervous system; that it was not toxæmic, and that catheterism alone, without injury or sensible irritation, was in these circumstances sufficient to originate the febrile phenomena and process. In 1868 Sir James Paget notices this fever, and makes some remarkable additions to our knowledge of it. He says that when the urine is of low density and abundant, when the patient is gouty, dyspeptic, or otherwise chronically disordered, when having a stricture, it becomes irritable and weakens the health; or when, being old, something has occurred to cause temporary depression of the health, catheterism will be specially dangerous, and may bring about a fever ending in death. He leans to the opinion, but does not distinctly express it, that renal degeneration is the cause of the fever, but admits that so far as his own experience goes the cause is apparently inadequate. Lastly, he states that the mortality of such cases is from three to four per cent., which, even with my grave views of the subject, is a much higher ratio than my own experience would have led me to expect. In 1871 Banks, of Liverpool, describes the effects of simple catheterism, and classifies them into three varieties: first, rigor with malaise, recovering speedily; second, rigor with malaise and prostration, followed in a few days by fever and death; and third, cases of shock, producing death within sometimes a single day. Admitting that renal disease predisposes to such attacks, he denies that they are due to suppression of urine, and he ascribes them to shocks of greater or of less severity propagated through the sympathetic nervous system. Here the nervous theory begins to preponderate over the other. In 1873 Malherbe, in his work on "Fever of Diseases of the Urinary Passages," presents a fairly just account of the state of our knowledge of this subject at the time of publication, and he adds certain important cases of his own. These cases are illustrated by a number of interesting and instructive temperature charts. He avers that the fever may arise without local irritation, describes it as uræmic, alleges that the predisposition to it is renal, and whilst admitting—nay, giving evidence of the admission—that in some cases, not a few, no structural lesions are found after death, he yet holds to the hypothesis that the origin of the fever is in renal imperfection.

In 1877 Mr. Marcus Beck contributed to the further elucidation of this subject two important papers bearing upon them the marks of practical knowledge, accuracy of observation, and careful thought. Describing the fever in which death may occur in from nine to forty-eight hours (and not, as I found, noticing the longer fever of which I speak), he holds that the predisposition to it lies in chronic disorders of the health, in renal imperfections, and in age; that the exciting cause is probably mechanical irritation or lesion of the urethra, and that the fever is begotten through irritation of the spino-cerebral and sympathetic nerves reflected upon the kidney, and bringing about structural or other in-

sufficiency thereof. Beck strongly supports the hypothesis that the fever is uræmic.

Now, without carrying it further, it will be seen from this rough historical retrospect that catheterism is occasionally followed by a fever, which has received the various names of urethral fever, urethro-vesical fever, urinary fever, uræmic fever, catheter fever, and so forth; that in some cases this fever is dependent upon, or associated with, purulent arthritis, ordinary pyæmia—what is known in England as surgical kidney or interstitial nephritis—and that in a small, but still noticeable, percentage of cases no adequate structural cause of death has been found. Now, it was of this last variety of fever that I spoke upon a recent occasion at the Clinical Society, and it was of this variety alone that I made, or mean to make, the following propositions:

First, that about middle life in men perfectly healthy, or with no discoverable evidence of disease, except perhaps, and even that not always, a low density of urine, the commencement of the habitual use of the catheter, is sometimes followed by fever of the remittent type, which often ends in death, and that for the fatal issue in such cases no adequate structural explanation can be found. Secondly, that it is important that such a fever, arising in the midst of apparent health from such a seemingly small cause, and leading so often (as it certainly does) to a fatal issue, should be well and widely known, lest death should take the friends of the patient by surprise, and arrangements necessary to the welfare of a family should be left unmade. Thirdly, that although it is well known that in persons affected with renal disease, or with chronic gout, or with grave disorders of the general health, the commencement of habitual catheterism is attended with peril to life from secondary fever, the fact that this fever may arise in what seems to be good health, and without the mediation of any visible structural lesion, issue in death, is not well known—or at least well known only to a few—and has, I repeat, no adequate place in English surgical literature or in the English surgical teaching of this time. Of course this knowledge will be found, as I have in a very imperfect way shown you, in special monographs and papers, but those are the luxuries of the few, and for the most part the luxuries of specialists who work in that direction; but such knowledge should be, as I think, fully imported into all our common text-books, and so made accessible to the whole body of the profession. Fourthly, that this fever is neither distinctly uræmic nor distinctly pyæmic; that, although having some of the characters of each, it has all the necessary characters of neither; that probably it begins in the nervous system; that probably the disturbance of the nervous system reacts in the first instance upon the general metabolism of the body, and in the second instance upon the secretory organs, beginning with the kidney; that the effect upon the kidney may consist either in structural alterations of the kidney, invisible by the aid of our finest instruments of research, or (as seems to me much more probable) in alteration of the constitution of the blood, that dynamic condition of its constituents in the renal vessels essential to the elaborative action of the secretory cells thereof; and lastly, that the concurrence of these conditions may, and often is, enforced by septic reabsorption into the blood. Fifthly, that a more complete knowledge of this variety of fever, and of the conditions of its origin, maintenance, and increase may, at least we may hope, lead to a material diminution of its mortality; and that even now, by treating in a serious manner entrance upon catheter life, by taking the precautions set forth by Sir Henry Thompson, by great temperance in the use of foods and stimulants, by rest, warmth, and by other general means upon which I shall not now dwell, such mortality, I repeat, may be possibly considerably diminished.

Of these propositions the one at the present moment most open to attack is the fourth, wherein it is asserted that this fever is not distinctive and exclusively

uræmic. For in these days it has come to pass that almost every writer of distinction adheres to the view of the uræmic origin and nature of catheter fever, or of the thing known under that and other names, and I am, as it were, left by myself very imperfectly armed to oppose it. I oppose it. I ground my opposition to the exclusively uræmic theory upon the fact that the phenomena of catheter fever, not as they exist at a particular moment, but in their assemblage and in their progress together, are different from those of the ordinarily recognized uræmia. The duration is at once longer and shorter—longer than that of acute uræmia, and wanting its headache, its perversions of sensation, its changes in the urine, its convulsions, its profound coma; shorter than that of chronic uræmia, wanting its neuralgias, its recurring headaches, its defects of sight, its fleeting paralyses, its itchings of the skin, its vomiting, its characteristic breath, its attacks of dyspnœa and palpitations, its painful nervousnesses, its low temperature. Furthermore, the urine of the catheter fever of this variety, at least of catheter fever, is always loaded with micro-organisms of various kinds, and although it is deficient in urea and contains more or less albumen, it deposits no tube casts and it is capable of amendment. Lastly, whilst chronic uræmia issues in death, catheter fever may issue, sometimes does not issue, in complete recovery. Sir Henry Thompson may remember that I saw with him a distinguished nobleman not far from Oxford street, who had to make an entrance upon catheter life, and he very justly and wisely warned the relatives that it was a serious procedure, and that perhaps he might suffer constitutional disturbance after the starting of this mode of life; and it happened that he did suffer this constitutional disturbance. It happened indeed that he had a mild variety of this fever which I am now describing, and that it continued for between a fortnight and three weeks. Eventually, with Sir Henry Thompson's help, he recovered, and I think I may say now, five, six, or seven years afterwards, he is in good health at an advanced age. Except in its long duration, in its occasional rigors of great severity and its exceptional clearness of mind, the phenomena of what is called endocardial fever resemble more nearly those of the fever which I have called for the moment catheter fever, than any other malady with which I am acquainted.

Two questions of a practical kind arise out of this study of the history of catheter fever. The first is this: seeing that by almost universal assent the fever originates at least in a disturbance of the nervous system, and seeing furthermore that in the cases accessible to me at least there is no account of the fever following in cases where narcotics or anæsthetics have been used, may it not be that the fever is capable of being cut short by the administration on entering upon habitual catheterism of narcotic or anæsthetic remedies? I remember that my great master, Syme, in Edinburgh, for a reason which his instincts very often knew better than his understanding, invariably gave his patients whom he had to catheterise frequently a grain or two of opium from the very beginning, and I must also add that he was singularly free from catheter accidents. The second question is this: assuming the presence of the fever, and seeing that quinine has signally failed in controlling it, what are the drugs to be employed on such occasions? and what is the sort of hygienic management to be followed, especially in respect of food and alcohol, which are so variously used on such occasions in order that the fever may be brought, if that be possible, to a successful ending?

Such, then, are the main conclusions which I have drawn from my fragmentary studies of this form of catheter fever. I know that they are incomplete; I even fear that they may be inaccurate; but, however this may be, I submit them to your consideration, and I console myself with the reflection that they may call forth the ripened experience of practical surgeons, who, in this matter, furnished with a larger knowledge and a more practiced judgment, may

be able not only to correct me where I am in error and to confirm me in any small point where I may have caught the truth, but to supply us with the very sort of knowledge which at this juncture we need and ask.

A vote of thanks having been passed to Sir Andrew Clark for his paper,

Sir Henry Thompson said: Sir Joseph Fayrer and Gentlemen—I received a very courteous invitation from your secretary to take upon myself the very responsible task of opening the discussion upon Sir Andrew Clark's paper. I may perhaps be permitted to premise that, in common with the rest of you, I hear this paper for the first time. You must not suppose that the acceptance of the position I have taken has carried with it the slightest information as to the line that Sir Andrew Clark would follow, or of any facts that he has brought before us to night. Had I had that advantage, I might perhaps have been able to offer you a better *résumé* of what I might desire to say respecting it. You find me, therefore, rising with an enormous amount of matter in my mind which I hear for the first time, admirably arranged, and resulting from the diligence of Sir Andrew Clark, with the careful power of organizing what he has to deal with which he so manifestly possesses.

I desire in the first place, if I can, to see how I may divide this large amount of matter in an orderly way so as to deal with it in detail. I must thank Sir Andrew Clark in the meantime for the opportunity he has given us of discussing this question. A more important question can scarcely come before us in connection with this department of surgery, and which, having naturally seen a good deal of, I should be glad to endeavor to throw any light upon in my power. First of all, I desire, with great deference, to object *in limine* to the title itself of "catheter fever." I do not think Sir Andrew Clark holds very keenly to it, for he said "What we may call catheter fever." I must object at present to the term, and I think we shall see before I have finished the ground upon which the objection is made. There is a great deal of information floating in the minds of many of us, without perhaps being distinctly formulated, in relation to this subject, and it is precisely these formulæ which Sir Andrew Clark asks for to-night. He has given us the terms employed to denote this fever by many writers, commencing with Velpeau's, but I think we should do better to adopt the one simple and familiar term of urinary fever, and afterwards discuss how much of that may belong to the catheter, and may have any right to be called catheter fever. I think it becomes our duty first to inquire what urinary fever may be. Sir Andrew Clark has proposed for discussion catheter fever, which is only one form of urinary fever, and he has asked us to discuss one particular kind of it, evidently suggested to his mind by the two cases which he saw—one in 1850, which made a great impression upon him, and the other in 1865, which he saw with Mr. Peter Marshall. These two cases I take to be types of the kind of fever that he desires us to discuss to-night. But first, in order that there may be no mistake or confusion as to what it is we are discussing, let me say that in my experience—and I believe I am now formulating the views of us all who have had any experience in the matter—that there are, regarded from a clinical point of view, three distinct forms of urinary fever. The first, perhaps, should scarcely be called an acute fever; it is simple febrile attack. All observers will agree that it may be called an acute transient attack—the most common phenomenon we observe in connection with urinary organs, the urethra particularly, when mechanically disturbed. We are all familiar with it, and it may occur after certain provocation which is not always catheterism. It may happen equally after other disturbing conditions, but, inasmuch as the catheter or the bougie is the implement in ninety-nine cases out of a hundred which thus affects the urethra, the febrile symptoms have been called under the circumstances "catheter fever." But it is really a form of urinary fever—a single paroxysm occurring after provocation. We are all familiar with it as occurring within four or five hours after

that provocation, commonly after the first passing of the urine. Supposing the instrument has been passed at a certain hour, then in three or four hours, shortly after passing water, not invariably, a severe rigor occurs, followed by dry heat and pains in the back, and that again followed by sweating. These symptoms pass away slowly, no recurrence takes place, and the patient is after two or three days as well as ever. That I would call the acute transient attack. The temperature rises rapidly and very often highly during the cold stage; it continues during part of the hot stage, and it gradually falls and ceases to be elevated through the sweating attack. The whole series of phenomena may occupy four or six hours, anything up to twenty-four or thirty-six hours, and it may manifest very different degrees of severity. And this attack occurs in persons who have the most healthy renal organs; but whether it occurs always from one cause I think is very doubtful. Certainly I think it occurs occasionally from a simple absorption into the bloodvessels of some small portion of the urine, and the attack I have described is simply a sign of nature's efforts—a "storm," if I may so term it, produced in the system while nature is getting rid of the poison. I think there is another kind of attack, which occurs solely as a nervous attack, and that the phenomena described may be caused by two conditions there can be no doubt. I think it is the first, the typical form, in which urinary fever is presented—the acute transient attack. The second distinct form we meet with is the acute recurring form. We will suppose that the patient who has had such an attack as I have described having become nearly, if not quite well, two or three days afterwards has another attack. This second attack always gives rise to a certain amount of suspicion or anxiety on the part of the attendants; for mostly some degree of renal implication must be believed to exist. In two or three days, by no means after any regular interval, perhaps he has another, and one's anxieties are increased; but by no means necessarily should there be any alarm in such cases, because we find that they often recover with rest and care, and in connection with treatment of the local disease with which they are most associated, probably stricture. This will cause, perhaps, some anxiety; but after a short time, with a good deal of lowered health, it comes to an end; and after four or five attacks the fever disappears. Such cases are also quite familiar to us, and I think we must regard them as examples of the second distinct type —that of acute recuring fever. Both of these are, I conceive, excluded from the cases which we are especially considering now. The form of case on which Sir Andrew Clark has laid most stress this evening, and out of which this discussion originally arose, is the third form, entirely distinct from those which I have sketched, and it may be called the chronic or continuous urinary fever. I can scarcely, perhaps, describe it better than it was described by Sir Andrew Clark in reference to those two cases. It comes on very insidiously, not necessarily by any smart rigor, with perhaps a little chilliness, and usually in an old man who has had deficient power of passing water for a very long time; then, when it is absolutely necessary for him to commence catheterism, he begins to feel out of sorts, loses appetite, is thirsty, has a dry tongue, is always feverish, but without distinct attacks; meantime the temperature is not much interfered with necessarily, and sometimes not at all. As an illustration of this, I may say that I have been called to two cases of that kind during the last week, the second of which I saw to-day. When first seen there was complete retention; the catheter was absolutely necessary, and forty-five ounces were removed. All possible precautions were taken, and now, on the fifth or six day of catheterism, he is somewhat delirious, and in a not very hopeful state. He has a temperature slightly under 98°, taken by myself to-day. The marked difference in this character of this third form is that which I call your attention to—sometimes increased temperature, sometimes a wavy line of temperature from day to day, at others rather below the average, and this latter is a condition which I may re-

mark is by no means a hopeful one. Now, I have not mentioned one class of cases which has been referred to by Sir Andrew Clark, and which I think we have no right to call fever at all—I mean those cases in which death will occur from twenty-four to thirty-six or forty-eight hours after the attack. I have referred to such cases, although Sir Andrew Clark possibly has not seen it, in my writings, but purposely have not classified them with fever because I thought that these phenomena did not come in connection with any feverish condition. This is clearly a case of shock of some kind, and when we know that the simple passing of a bougie upon a young man who has never had an instrument passed before in his life very often produces a rapid fainting fit and then a fit of slight convulsion, looking more or less frightful for a few minutes, but invariably disappearing before long; when we see this happening on the mere passage of a bougie in a perfectly healthy man upon whom some exploration has been necessary, we cannot but be struck with the close sympathy that is established between the urinary organs and the nervous system—and it is therefore not surprising that in a very few and exceptional cases, with no obvious disease existing in the organs, the passage of the catheter sometimes may bring about a fatal result in twenty-four hours, no special lesions being found to account for it. I think these have no right to be included in any discussion under the name of fever, and especially of catheter fever. I will now ask you just to consider what I may call the typical form, in which this third condition of continuous or chronic fever reaches us who are surgeons. But perhaps before I do that I may just advert to one thing which I desire particularly not to forget. Sir Andrew Clark expressed surprise that I should have said that in these fatal cases of urinary fever the autopsy revealed invariably advanced disease of the kidneys and ureters.

Now I have never said anywhere in any part of my writings that such is the case, but only that such advanced signs were found in relation with the chronic continuous form of which I am now speaking associated with long-standing, neglected disease. I have especially limited that remark of mine, and it occupies the last three lines of one of my lectures on this subject. I there state that in no case have I ever seen a fatal event in the circumstances which I am now describing in any other than advanced disease of the kidneys and ureters. Happily, a great many cases do not require autopsy, as in the case, so well referred to by Sir Andrew Clark, of the nobleman whom he and I saw together. That occurred nine years ago, and I believe that gentleman was then sixty-five years of age. I remember the case well. The patient disliked, naturally enough, the restraint necessarily imposed, and was, as all such patients are at the outset, much disturbed on learning that it would probably be essential for him from that time henceforward to use a catheter on every occasion on which he desired to pass water. He was then sixty-five, he is now seventy-four, and that catheter has added that number of years to his existence, which has been passed in comfort and in activity since. Notwithstanding, his case was one of severe and long-standing urinary fever, and I was anxious about the results of it for some time; but the patient has done well, as many, many others have done. Hence, to a certain extent, my inability to supply you with the result of autopsy. Then there is another reason, which is also to the point, that is that in private practice it is not always easy to get autopsies. It is not as in hospital cases. How I miss the enjoyment and the advantage of hospital experience, which, having had for twenty-five years, I was at length compelled to give up. You can imagine that it is not always by any means easy to get the post-mortem examinations we require, nor is it always easy under a very great press of business to find time to make them, but whenever I can make them I always do so. But I repeat, however, what I said in the three lines at the end of my lecture, that I have seen this continuous chronic form appearing in elderly men only after long-standing obstruction of the urethra, and then not without advanced renal disease. Lastly,

let me refer to the case which I said was a typical form of that which often reaches the surgeon. The cases which reach the surgeon have not unfrequently such a history as this: A man of sixty-four or sixty-five tells me that for a long time he has been passing water five or six times or more in the night, and every hour and a half or two hours in the day. I ask him to pass some, and he does so with difficulty. I observe a dribbling stream of pale water, and he assures me that he has passed all he can. But at the lower part of the abdomen there is an obvious protuberance, and before doing anything further I get his history more completely. He states that he has been in this way for a year. "How much more?" I ask; and then, perhaps, he thinks it may be two. Then, when I ask him, "How long have you been rising two or three times in the night?" he replies, "Well, it may be six or seven years." Then I know full well that I have a case of advanced obstructive disease of the urethra, almost certainly prostatic, and I have to convince him that such is the fact; because, if I simply told him that he had a distended bladder, and that it was necessary to use the catheter, he would not believe it; he would probably reply that he wanted help to check the unnatural flow, and not contrivances for withdrawing it. He is told that his bladder, to use a simile he can understand, is like a cask with the tap at the top instead of at the bottom, and that the reason why he makes water so fast is that he can only pass an ounce or so from the top while the vessel is filled below. It is very necessary that patients should understand this. The catheter is then introduced, and to his great astonishment a number of ounces, perhaps twenty or thirty, of urine are drawn off, and, if the quantity is large, leaving some still there. It is necessary to tell him what is the matter, and to make him see it for himself. On inquiry how this state of things has come about, it often appears that he has neglected his symptoms altogether, sometimes indeed that he has had some kind of treatment for years; but that he has avoided all suggestions that further examination is necessary. Perhaps he has been sent to Contrexeville or to Vichy or somewhere else, and without any benefit; that he has undergone a considerable amount of treatment there and elsewhere. Then he says, "Sir, I have the greatest possible objection to the catheter. I have been told that if I once adopt the catheter I shall be in a worse condition than ever I was, and only add another to my present troubles. The condition of this patient is already damaged irretrievably.

What should be said by the surgeon to such a patient is this—and it is a plan from which I have found great advantage during the last few years, as I have especially mentioned in a recent edition of my lectures, "I will have nothing to do with you if you cannot arrange for remaining without any exercise, in a warm room, perfectly quiet, with gentle careful catheterism as often in the day as may be necessary," He is to be told that it is an important event in his life to exchange a distended bladder for one that has to be maintained nearly empty; and that the change to this new life is one that requires a sort of apprenticeship and the closest supervision. Formerly I was less circumspect, but experience has taught me the necessity for this cautious procedure. For after all, it must be evident that a great number of these cases do exceedingly well without any precautions; if the quantity is not too large no care is necessary. But where the residual urine is considerable, it mostly involves serious consequences, unless great care is taken. Nevertheless, as a most rare exception to that rule, I may say I once saw a man with five pints of urine withdrawn from his bladder, and commencing what Sir Andrew Clark terms his catheter life without any precautions, and without a single rigor being occasioned by it. The reflection, then, which I cannot help making is this: that it is not an attack of any catheter fever, but the want of the catheter at an earlier stage of the malady, which has placed these individuals in their dangerous condition. In these cases, where the patients have been long taking medicine and travelling from place to

place in search of relief, had the catheter been used when there were only six or eight ounces left in the bladder we should have heard nothing of catheter fever. So that you will see the ground of my objection to the term, and will understand my belief that the only association that the word has with this fever is the important fact that the catheter was wanted and was not used. Perhaps in the progress of such a case we may hear that a fatal event takes place some two or three or four weeks after catheterism was commenced. I ask what was found at the autopsy, and I am told that it was surgical kidney. Then I reflect, and I say with equal justice, "Surgical kidney!" Surgical kidney only in the sense that it came to pass through want of surgical treatment at the outset. Surgical kidney and catheter fever are two terms that I do not like to accept in connection with this matter. I think we had better adopt for the symptoms the term of "urinary fever," and for the pathological condition of the kidney a term which shall describe the form which is present; for these symptoms may arise in connection with varied forms of disease of a local kind, and even disease of septicæmic origin. And if in treatment we can carry out the plan I have ventured to intimate in connection with it, I hope and think we shall find that there are less of these fatal results than unfortunately have before obtained. The instruments employed in catheterism were formerly often too rigid, too large, or too carelessly passed, and have occasioned unhappy results. I trust that you will forgive me for having taken up so much of your time. Yet I am very conscious that I have failed to notice several points in the instructive and suggestive paper we have had the advantage of listening to this evening.

Mr. Berkeley Hill said he was surprised that Sir Andrew Clark had not found kidney disease in the second case which he had narrated, where the bladder was obviously diseased. He thought there must have been some obstruction to the flow of urine from the kidneys which would have occasioned renal alteration. In nearly, if not all the cases which he had been able to collect from the records of University College Hospital, marked disease of the kidneys of the nature of an interstitial nephritis existed.

Mr. Savory: Allow me to express the pleasure I have experienced in hearing Sir Andrew Clark's paper, calling attention to a fact of great importance to all surgeons, and one well worn, like many others which are familiar to us, but likely to be overlooked in the multitude of new subjects that come before us day by day. Seeing how constantly catheters and all kinds of instruments are passed into the urethra, and how comparatively seldom it is that any serious consequences follow even when catheters and other instruments are somewhat roughly used, I think it follows that there must be something peculiar in those persons who suffer from the use of them, and of these persons I think we may say that one class consists of those who have mischief in the kidney.

That a large number of persons who experience serious evil from the passage of the instrument, whether it be in the form of fever or something still worse—even to a fatal issue—I cannot doubt that in many of these cases the kidneys are seriously affected. I am also sure that in many of these cases the kidneys are not affected in the ordinary way—that is to say, in ways corresponding to the descriptions which we get in works on certain diseases of the kidney. They are not characterized after death by very striking changes, but that they are affected I think is evident from certain facts which often come before us on careful inquiry during life. I have been accustomed for many years past previous to performing operations, as I suppose all surgeons would be careful to do, to examine into the state of the kidneys; and what I would look to, particularly in these cases, is not whether the kidneys yield a large quantity of albumen, or even a small quantity of albumen, or whether there be in the urine certain forms indicating advanced degeneration; but what I think is of more mportance is the estimate of the quantity of urea which the kidneys are sep-

arating from the blood. In many cases I am convinced that the kidneys are in this respect weak, and of all disasters which can happen to the surgeon probably the worst comes from those causes where this condition of the kidneys has been overlooked. In many respects the heart and lungs are organs more immediately vital than the kidneys; but with regard to serious operations, or in considerable shock to the patient, I would rather have thoroughly sound kidneys on my side than even a sound heart or lungs; and I think it is in this respect that the kidneys often fail. Therefore, I should take it that in some of these cases which were said to show no appearance of mischief after death, the kidneys have still been at fault. I was struck during the reading of Sir Andrew Clark's paper with the statement that the urine was low in density. The urine being low in density often suggests to surgeons that such mischief as this may lurk behind, therefore I exclude this class of cases by saying that they form a large proportion of those in which catheterism is likely to be attended with disastrous results. Then, where the kidneys may be perfectly sound, we come to a class which I should think is very rare, in which after the use of instruments we get undoubtedly blood-poisoning, septic inoculation. This subject of blood-poisoning is a very wide one; it presents various phases, and we all know that we can distinguish separate classes of cases of blood-poisoning in this regard. We now come to the cases to which I suppose Sir Andrew Clark more particularly alludes—those cases in which very severe fever (for I would accept the term "fever" without the objection which Sir Henry Thompson takes to it), or even a fatal issue occurs, and in which there is certainly neither renal degeneration nor any form of blood-poisoning. I for one think that there are two distinct sources of fever, or as I would call it, to avoid objection, constitutional disturbance. Fifty years ago there was only one source of constitutional disturbance recognized, and that was the nervous system. Then, as our knowledge of blood-poisoning increased, the interest and importance of this so overshadowed the other that for some years past it seems completely to have shut it out of view, and no surgeon now talks about the nervous system as a source of constitutional disturbance consequent on local irritation. By the way, the term "local irritation" is an uncommonly good one, and I was glad to hear Sir Andrew Clark use it to-night. We all remember the classical work of Mr. Travers on "Constitutional Irritation." When he wrote that book one source only of constitutional irritation was understood, and that source was the nervous system; but so true and faithful are his descriptions of the cases which he gives that by the further light which we now possess it is quite easy for surgeons to read these cases through and separate them into their two distinct classes—to say that one class of these cases belongs to the nervous system and the other belongs to blood-poisoning. I take it that in the cases to which Sir Andrew Clark has more particularly alluded to-night we have a most conspicuous and very striking example of constitutional disturbance produced through the nervous system—in fact, what we venture to call, using the term in a broad and large sense, to which I see no objection, cases of shock, in which the effects of a shock either lingered on towards recovery, or in some cases terminated in death. And there is this remarkable fact, that of all parts of the body no part seems in so close and intimate association with certain nerve centres as is the urinary apparatus. There are many facts bearing upon this: every surgeon must be familiar with the fact, which is confirmed by physiology, that during the administration of anæsthetics after the power of reflex action has ceased in all other parts of the body, it can still be provoked by irritation about the urinary organs. If you decapitate a turtle and wait for some hours, the power of evoking reflex action dies out part by part, but the last part in which you can evoke it is the region of the cloaca. With regard to the urethra and the organs in connection with it, all surgeons have for a long time past been quite familiar with the fact

that certain "accidents," as the expression goes, occur when these parts are dealt with in various surgical ways. It is not merely the passage of the instruments into an elderly person, or a person who has been for some time the subject of disease, but I suppose it must be in the experience of ever surgeon that occasionally, even in the very young and healthy, a considerable amount of shock is caused by the introduction of the instrument. I suppose it must have occurred to all of you to see in some cases, even after sounding children for stone, that a decided shock is produced by the operation. I have seen death follow the amputation of the penis, and after death not a trace of injury has been discovered in any part of the body. I repeat, it is surely familiar knowledge to us all that of all parts of the body in this relation, the urinary organs are the most delicate tests of reflex action of what one must call a morbid kind. There is another fact which bears very strongly upon this, and that is the effect of catheterism to which Sir H. Thompson has alluded. We occasionally get faints, and perhaps more often rigors are produced. Now, this subject of rigor is in itself one of great importance. We all know that there are rigors and rigors. First of all, there are physiological and pathological rigors. There are rigors from mental emotion, rigors from cold, rigors from fear, rigors which are unattended by rise of temperature, and these we would call physiological. Then we come distinctly to rigors which are attended by a rise of temperature, and then we have what we may call pathological rigors. Now, although it is perfectly clear that in the great majority of cases severe and prolonged rigors, especially those which are attended or followed by sweating, indicate septic absorption, yet it must be clear also that we have rigors which indicate nothing of the kind; and if I were asked to defend this position I do not know that I could take any stronger case than those rigors which immediately or very soon afterwards follow the introduction of the instrument. Therefore, Sir, as the sum of all this, if I were called upon to attempt to answer the question which Sir Andrew Clark has raised to-night, I should say that those cases to which he has particularly alluded are cases in which constitutional disturbance or fever or pyrexia is produced by local irritation through the nervous system.

Mr. Reginald Harrison laid special stress on the antiseptic treatment of cases occurring in elderly people where the dilated bladder required catheterism. He was in the habit of substituting some antiseptic fluid for the urine which was drawn off, and thought this procedure tended to diminish the liability to the occurrence of constitutional disturbance. He was inclined to accept the septic view of the nature of the fever. Dr. Althaus spoke of different forms of retention of urine; some were of a spasmodic character. Mr. Bennett May made a few remarks on the subject. Dr. Maclagan regarded the view of Sir Andrew and of Mr. Savory, that the nervous system had much to say in some of these cases, as of the greatest significance. His own experience entirely coincided with that opinion. Sir Joseph Fayrer pointed out the greater liability, and the greater severity, of the constitutional disturbance which occurred after catheterism or other surgical operations on the urinary organs when the patient had been, or was, the subject of malarious disease. He dwelt on the value of the remarks from Sir Andrew, Sir Henry, and Mr. Savory. His own experience in these matters in India had led him to views which agreed in many particulars with those which fell from the lips of the three gentlemen mentioned. He also specially alluded to the importance of a knowledge of the state of the kidneys in such cases.

Sir Andrew Clark, in reply, said: I beg to thank you, in the first place, for having so patiently listened to a physician who has been treading upon doubtful ground. The usual formula on such occasions is that "the author having replied, the society adjourned." I think that is an indication of the wishes of the auditors, and, at this hour, it would be impossible for me, without taxing your

patience very greatly, to reply to each individual speaker in this debate. But I can assure the speakers who have done me the honor to criticise my paper that they shall be answered in due time. To-night I will satisfy myself with referring to one or two of the principal objections that have been made.

The first objection has been to the title of the paper. Before I answer that let me say that on a previous occasion I was misapprehended because I spoke without previous preparation, and I determined to-night to speak with previous preparation, and to speak as clearly as it was in my power to do, feeling assured that there could be no longer any misconception of my meaning. But I regret to say—as a body of Englishmen you will forgive me for saying it—I have been as much misunderstood as ever. With regard to the objection to the term catheter fever, I purposely said, and I repeat it, that I used the term for the moment simply for provisional use, to indicate the variety of urinary fever, or whatever fever you like to call it, which I had in my mind. The second statement which I have to make is that the debate, interesting as it has been, has been in a great measure beside the paper. The paper was meant to call attention to a certain form of fever occurring after catheterization, without reference to the reason for catheterization, and attention was fixed on a certain series of propositions which I read as slowly and clearly as it was possible for me to do. Next it has been alleged—or, if not alleged, clearly implied—that, after all, a great deal of fuss has been made about this; that catheterism is a very frequent affair, and that death from it cannot be so common, or we should hear more about it. One of the most careful observers that I know, who deliberately uses his words, estimates the percentage of death at 3 and 4 per cent. It cannot surely be that English surgeons have lost their respect for the value of human life. What does 3 or 4 per cent. mean? Surely a great deal if it involves the lives of heads of families, and I should be sorry to think—indeed I do not think, notwithstanding what has been said—that there is on the part of English surgeons any want of due reverence for the safety of human life. The next objection is one that has been made by Mr. Berkeley Hill, who is surprised that I should have examined cases—and I have examined more than I have stated—of fever following the use of the catheter, and found no evidence of disease, for he (except in two cases) has invariably found it, or it has been invariably found. Will he forgive me for saying that I am equally surprised that a gentleman of his position should have had to make such a remark. How does he make it? Upon his own experience and the experience of his hospital. But what is the nature of hospital experience? Cases that come to the hospital come to it when they can no longer stop out of it—old, worn-out, diseased people. Surely the same reason which makes the prognosis of hospital physicians so untrustworthy makes the statement of the surgeon not tenable. When you hear people putting the duration of kidney disease at about eighteen months, you may be quite sure that it is a hospital physician who has said it. And why? Because our active hospital physicians at a comparatively early age, when their experience of private practice, which differs from hospital practice, is not large, meet with cases in the hospital at the end of their journey in life, the poor man with renal disease has kept at work, and has never thought himself ill, however much he might suffer, until he had been obliged to take to his bed, and the young hospital physician usually dates the duration of the disease from the time when the man felt so ill that he was obliged to take to his bed, whereas in all probability the disease may have been going on for 20 years before. Mr. Berkeley Hill finds as his experience that in all such feeble, worn-out cases there has been renal disease. I do not doubt it for a moment, but he makes this upon his own and his hospital's experience, and forgets or does not allude to the experience of other people in the world. Let me tell him that Velpeau gives

several cases in which no lesion has been found in this sort of fever that I have been describing, and his post-mortems were made in the public theatre, not by himself. Then, secondly, Marx, in the very able monograph to which I have alluded, gives six or seven cases in which, with the sort of fever that I have described, and after the utmost care in the examination, no structural lesion could be found. Then I may pass on to Malherbe, who also gives a very fair and complete *résumé* of what is known on the subject, and who himself is an advocate of the opposite theory. Like an honest man, he confesses at once that there are several cases in which, with the utmost care, no structural lesion could be found in this fever, and he gets out of it by saying, "Well, you know, I am sure there was some functional disorder."

Now, after that statement of Mr. Berkeley Hill, and my reply—my reply being that many such cases are on record and placed beyond question or doubt—I repeat that I am much surprised that Mr. Berkeley Hill should have made that statement. Then there is another objection which has been made, indirectly indeed, but still with sufficient force, implying that I was objecting to the use of the catheter. On the contrary, I think the reason why such evils, not as I have been describing, but many other evils that I enumerate in cases following catheterization, have existed, has been because the patient has been unwilling, owing perhaps to bad advice, to begin with catheter assistance at once. That is my feeling, and if it is supposed by any Fellows of the Society that I have any objection to the use of the catheter, I must beg to tell them that they are mistaken. On the contrary, the difficulties which I have seen as a physician being occasionally called into these cases have plainly arisen, as Sir Henry Thompson has said, from the catheterism not being early enough. Let me next refer to the very important observation—and all his observations are both interesting and important—of Mr. Savory. He mentions a point which, I think, if no other point had been brought out this evening, would remain a memorial of a useful meeting. It is that he himself attaches, and he believes that every wise surgeon will attach, more importance to the condition of the kidney than to almost any other organ of the body in approaching the performance of an operation. Sir, it is twenty-eight years since I said that; I am not thinking of priority; but I am only wishing to show that the subject has been in my mind. I do not pretend that I was the first to say it, but I said it at least twenty-eight years ago; and on various occasions since, under the term of renal inadequacy, I have pointed out the great peril which exists in all such cases in performing surgical operations. It is only another illustration that those who are faithful observers can come independently to the same conclusion. I do not think that at this late hour I should encroach further upon the time of this society. I repeat humbly, but believingly, that the subject has not been thoroughly exhausted. There are most important points embodied in my propositions which have not been met in this discussion. I hope that some time—soon—we may be able under another, if not under this aspect, to reconsider this question, and keep closer than we have done to-night to the ground which has been laid open for discussion.—*Lancet.*

MEMORIAL MEETING OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA, AT THE NATIONAL CAPITOL, IN HONOR OF Dr. J. MARION SIMS, held November 21st, 1883; President Dr. A. F. A. King in the chair. Dr. T. E. McArdle, Secretary.

Dr. King stated that the regular order of business would be suspended, in order to devote the evening to hearing the report of the committee appointed last week to prepare resolutions relative to the late Dr. J. Marion Sims. He said that while the profession throughout the world would mourn the loss and

honor the memory of so great a man, he was glad to know that this society would not remain silent. While unprepared to attempt any adequate eulogy of Dr. Sims, he regarded him as an extraordinary genius, whose name would remain immortal in the annals of medicine. Among the greatest luminaries that adorn the professional firmament, Sims appeared as a comet, leaving a path of light that would forever reflect lustre upon the medical art. Reading only lately the old treatment of vaginal fistulæ, he referred to the great boon conferred upon the victims of this malady by the inventive genius of Dr. Sims. In conclusion, Dr. King called attention to portraits of the deceased, kindly loaned by Dr. Busey, and then called upon Dr. Garnett for report of committee.

RESOLUTIONS PRESENTED BY DR. A. Y. P. GARNETT, CHAIRMAN OF THE COMMITTEE.

Whereas, the Medical Society of the District of Columbia having heard of the death of our distinguished countryman, Dr. J. Marion Sims, with profound sorrow, and being impelled by feelings of the sincerest sympathy and warmest admiration for the lamented dead, desire to record the expression of their sentiments by the following resolutions:

Resolved, 1. That the sad intelligence of the sudden and unexpected death of Dr. J. Marion Sims, flashed throughout the civilized world with electric speed, has communicated to us a shock well calculated to overcome us with emotions of unaffected sorrow and abiding regret.

Resolved, 2. That as Americans we feel justly proud of the brilliant and efficient career of this eminent physician, whose original and valuable achievements in the domain of surgery, as well as his wisdom, superior skill and rare tact in other departments of his profession, illustrated a genius and intelligence seldom vouchsafed to mortal man, and which challenged the admiration of the scientific world, and deserved the gratitude of suffering humanity.

Resolved, 3. That we shall ever recall the man as one who combined an unusual and attractive beauty of manly form, with a refinement and gentleness of manner, and a genial cordiality of deportment, betokening the "kind, true soul within," which seldom failed to win and fascinate all with whom he came in contact, calling forth the grateful love of woman, and the admiring friendship of man.

Resolved, 4. That amongst the galaxy of the distinguished men of our country in scientific achievements, Dr. J. Marion Sims stands forth a grand, central light, illuminating the world of science, and fully receiving not only due recognition and reverential observation from the eminent savans of Europe, but royal homage from crowned heads, and grateful tributes from titled peers.

Resolved, 5. That although he had attained the period allotted to man, of three score years and ten, we deplore his loss, because we believe that the light of his genius had not grown dim with years, but that to him we might still look for future discoveries of hidden truth in the yet unexplored regions of medical science, which can only be penetrated and made manifest by a genius like that of Sims.

Resolved, 6. That a copy of the foregoing resolutions be sent to the family of the deceased as a respectful offering of our sincere sympathy and condolence.

ALEX. Y. P. GARNETT, M.D.
J. M. TONER, M.D.
SAMUEL C. BUSEY, M.D.
WM. G. PALMER, M.D.
W. W. JOHNSTON, M.D.

REMARKS OF DR. A. Y. P. GARNETT.

In presenting these resolutions, Mr. President, which are intended to express

the sentiments of this Body, I cannot refrain, sir, from adding a few words on behalf of myself individually. I enjoyed the honor of the acquaintance and friendship of Dr. Sims during the last five or six years of his life, and therefore claim the privilege of paying a tribute to this noble man as I knew and apprehended him.

I shall not attempt to present even a brief biography of the illustrious dead, nor is it my purpose to review the numerous and brilliant achievements which illustrated his rare powers and adorned his professional career.

The portrayal of these I leave to others who are more familiar with the history of his whole life, and who have doubtless rendered themselves better competent than I am to descant upon these themes.

Viewed from a social standpoint alone, we find him as much appreciated in the salons of European society, where his merits made him the petted favorite and envied recipient of royal honors, as he was the distinguished cynosure in the arena of professional effort. Almost unequaled in polished refinement and gentle fascination of manner, no one could be brought within the sphere of his magnetic influence without feeling the attraction and acknowledging the presence of an extraordinary being.

From the first moment of my acquaintance with this singularly gifted man I felt attracted to him by a mysterious and irresistible charm never before experienced in the presence of a stranger, and, almost unconsciously to myself, I conceived from that moment an interest which was destined in a short time to develop into lasting sentiments of friendship.

It was evidently through his superlative qualities of character and heart, and rare grace of manner, combined with his irresistible personal presence, that he won the exceptional popularity he everywhere enjoyed amongst men and women, not only in the higher circles of society, but in the humble walks of life.

A prominent and beautiful feature of his character was the kind and sympathetic interest he always manifested in the younger members of his profession. Were I familiar with the private history of his life I could doubtless there find many incidents illustrating this admirable trait. In view of the circumstances which call forth my remarks, it cannot be deemed egotism for me to give an instance of his kind thoughtfulness which considered others, even amidst pressing cares and outside duties, because it came home to myself during his recent visit to this city.

Though in Washington for only a few days, he did me the honor to call several times at my office, and conversed fully and freely of his plans and purposes in regard to his contemplated residence in this city; yet he did not forget to make especial inquiries after the health of my son, with whom he was personally acquainted, and to evince great interest in his professional plans. I can see now the earnest and interested expression of face with which he turned to me and said, when about leaving: "Be sure to make your boy come to see me; write and tell him to keep out of Charity Hospital, and send him to me." This interest was manifested towards the young doctor, not merely to the son of his friend.

Apart from the many personal associations which bound me to Dr. Sims, I may be pardoned, I trust, for referring to one incident of his life while in Europe during the late civil war in this country, which not only enhances the feeling of respect that I entertain for him now that he is dead, but served also as a bond of union between us during his life:

I allude, Mr. President, to the efforts made by the U. S. Representative at the Court of Belgium to induce King Leopold to refrain from bestowing the honor of his order upon Dr. Sims, because he sympathized with the people of his own section in their struggle for self-government. All that official influence, inspired by political and sectional malevolence, could accomplish was exerted against him, on the sole plea that he was loyal in heart to the South; and this

sinister influence so far prevailed, that the order of decoration (intended for merit and distinguished ability, that should have received just recognition from even a national foe) was actually deferred for a time.

I cannot repress, sir, the pride I feel that this great and good man was a native of the South, and that I can stand here to-night and claim for that section of this Union, although remote from the great centres of medical learning and the best opportunities of clinical observation and experimentation, the proud honor of having given to the profession the bold and intrepid pioneer in the art of gynæcology, in the person of McDowell of Kentucky, as well as that genius, skill and perseverance which developed it into a science, in the person of J. Marion Sims of South Carolina.

REMARKS OF DR. JOSEPH TABER JOHNSON.

Mr. President and Gentlemen: When John Hancock, President of the Continental Congress, signed his name first to the Declaration of Independence, in 1776, it is said that he wrote his signature in characters so large and so loud that the cry for liberty, which they represented, was heard around the world.

It may be said with equal truth and propriety that when Marion Sims fell so suddenly into the arms of death, the shock was felt wherever women suffer or surgery is practised.

Hancock, by his eloquence, wisdom and example, stimulated not only his associates but posterity to patriotism, learning and noble deeds. Sims by his brilliant genius, patient industry, wonderful skill and dexterity has saved the lives of many, and made the burden of life less irksome to countless numbers of this and future generations. Who shall say that the former is more deserving in fame than the latter?

Poets sing that he who dries a tear or saves a pang to suffering woman has rendered a service more praiseworthy, than to have fought a battle or captured a ship.

Those who have advocated great principles or instilled pure and noble thoughts into the minds of a people; those who by their valor have conquered the enemy of the State; he who by his conquests has added to the territorial possessions of his sovereign; statesmen who have originated, and by their zeal and ability carried through the Congress or the Parliament measures for the relief of the oppressed—all these have received just praises and adulation during their life, and monuments have been erected to perpetuate their memories after they were dead. Equally, if not more, are those benefactors of their race who devise means for saving life instead of destroying it, who by his genius rids the world of a scourge or a plague, as well as he who destroys an army or takes a city.

Prominent among the benefactors of mankind would I see the honored name inscribed, whose useful deeds we have met together to recount, and whose virtues it gives us a melancholy pleasure to commemorate.

If the sad procession could speak to us to-night—which would have gladly and mournfully followed his mortal remains to their last resting-place—made up of those directly benefited by the skill of this great master in surgery himself, and by the much greater host of those indirectly owing their relief from pain and misery to him, there would have been no uncertain voice to proclaim that this beloved name should occupy a position among the highest and noblest upon the pillar of fame.

Honored, as few have been in our land, by the presidency of the American Medical Association, that great representative body of physicians, and with the same distinction by the American Gynæcological Society, elected also to membership in scores of medical and scientific societies, these are exhibitions of the

esteem in which he was held by his countrymen, and of the fact that they delighted to do him honor.

As his reputation increased, so great became his fame that no city, State or country could retain him within their narrow boundaries, and before his too sudden death had taken him from us forever, he had been the reluctant recipient of the most flattering evidences of the regard of the great and the noble in many countries in Europe. Kings and queens actually besought him to accept their orders and decorations. The order of Knight of the Legion of Honor was conferred upon him by the French Government, and he was subsequently decorated by the King of the Belgians, also by the Italian, Spanish and Portuguese Governments.

One of the most remarkable elements in his character, Dr. Emmett said to me only a year ago, was the cool and ready ability which he always exhibited in an emergency. His unequaled and wonderful quickness to appreciate how best to turn to good account some unlooked-for occurrence during the progress of a grave operation had been a constant surprise to him.

This was exemplified in his operation upon a French countess whose life had been despaired of by the best medical talent in Paris. Sims, believing she could be cured, operated—in his weakness and prostration—in the presence of many celebrated physicians, and when about to close the wound, after the skilful removal of the cause of the malady, she apparently expired under the combined effects of shock and anæsthesia, whereupon a bystander sarcastically remarked: "Yes; your operation is successful, but your patient is dead. *We* could have done as well as that."

Sims had staked everything upon this, his first prominent operation in France, and, stung to the quick by the sarcasm of this sceptical Parisian, he dropped his knife, and sprang upon the operating table, remarking, "No, she shall not die," seized her by the feet and swung her head downwards, until the anæmic brain, with the aid of gravity, became supplied with blood. Nervous power was generated to cause the heart to send a vascular supply to the lungs. The patient drew a long breath, and the mysterious machinery of life moved again slowly into action—and the countess lived. The operation proved to be a success, and Sims' reputation was won.

Hanging the head downwards, in cases of suspended animation from chloroform poisoning, was not entirely new or original with Sims, but his cool, quick and successful grasp of the situation was the culminating climax which won to him the hearts of the French people, ever fond of courage and dashing display when crowned by success.

It was not, however, by stage effects, parade of wonderful cures, or the industrious importunities of partial friends or grateful patients, that Sims' glorious and phenomenal reputation was made.

This was founded upon the everlasting rock of solid scientific attainments, and upon those rare elements combined in one man which go to make up, round out, and complete the character of the Christian gentleman. It is said of him that no woman ever distrusted him, while his exceptional purity of speech and life, together with the personal magnetism of his smile, his words, his manners, attracted many to him and held them chained with the silken cords of love, gratitude and esteem.

Gaillard Thomas says: "If all that Sims has done for gynæcology were suppressed we should find that we had retrograded at least a quarter of a century."

This coming from the most prominent, original and justly-celebrated gynæcologist in America, and scarcely second to any throughout the world, is praise indeed, and were it not a sad pleasure to his friends and professional admirers to enumerate his many achievements for science and humanity, and his many

estimable qualities of head and heart, it would be a sufficient eulogy, as it epitomizes whole discourses, and might constitute an appropriate epitaph to inscribe upon his monument.

I have left it to others to describe his operations and to speak of the era in gynæcology inaugurated by the invention of his speculum, and the use of silver wire sutures in vagino-plastic surgery.

It gives me a peculiar pleasure, however, to speak of this great man, who has brought such relief to suffering womankind, whose reputation is world-wide, who was courted by kings and princes, decorated by foreign Governments, elected to honorary membership in many European societies, and whose name is embalmed in the hearts and memories of thousands as a gynæcologist.

As a gynæcologist he began his career in Alabama, in 1836. In 1849 his fame in that State culminated in the perfection of his method of operating for the cure of vesico and recto-vaginal fistulæ. In 1853 he moved to New York, and in addition to the building up of an extensive and lucrative practice as a gynæcologist, he succeeded in establishing one of the largest and best-regulated hospitals in the world, devoted to the exclusive practice of gynæcology.

As a gynæcologist he visited Europe, and it was in this capacity that unparalleled honors were literally showered upon him, and it has ever been in the acquisition of his fame that he wrote, spoke and practised gynæcology.

The grand universal school of Medicine claims him with pride as one of her brightest and most particular stars, and is now everywhere engaged in her journals and societies in doing honor to his memory. The more particular division of Surgery claims him as one of her most skilful and renowned operators, and every professor of surgery has ere this spoken to his class of the glory of his career. But, Mr. President, though Medicine universal may claim him, though Surgery more especially may claim him, it is the specialty of Gynæcology which *owns* him, which cultivated and produced him, which he honored in his life and which *loves* to honor him in his death.

It is sad to think that his last years were too full of cares, occupation and ill health to permit him to finish the great literary work of his life, which would recount for the benefit of posterity the various steps by which he reached the elevated plane upon which he stood. He said to me in his parlor at the Arlington Hotel, during his recent visit to this city, in answer to my regrets that its publication had been so long delayed, with a sarcasm and pathos in his voice which I shall never forget: "My dear doctor, I shall never live to complete it. There are plenty of others to take up the work where I leave it, and I have more important things to do in the little of life remaining to me, than to write of what I have done in the past."

There is a sadness also in viewing the elevation of any man to a plane so high above his fellows that he has no equals of whom to take council, or for daily, friendly intercourse; but this sadness has its alleviation in the contemplation of our honored, loved and trusted friend, standing so high in the clouds upon the topmost round of the ladder of fame, that it was but a step for him *over* into the confines of that celestial country where the weary are at rest forever.

REMARKS BY DR. W. W. JOHNSTON.

The great apostle of hero worship has said that "Universal history . . . is at bottom the history of the great men who have worked here. . . . All things that we see standing accomplished in the world are properly the outer material result, the practical realization and embodiment of thoughts that dwelt in the great men sent into the world; the soul of the whole world's history, it may justly be considered, were the history of these." Is this doctrine true, or is it not nearer the truth to hold that great men do but utter the thoughts of

thousands *not great*, and "that all things that we see standing accomplished in the world are the practical realization and embodiment" of the strife and travail of the unfamed, often of the unknown? Events make men, and are not made by them. It took many years of discontent and liberty-craving in England to make a Cromwell. He came to the top as the ablest representative of the long-suffering spirit of rebellion against tyranny and intolerance. He did not make the revolution. The revolution made him. But none the less honor is due to those great names which mark the epochs of the world's history. That these great men did embody in themselves the power and intellect of thousands, gifted with intelligence and aiming at the same ends, is the highest tribute to their genius and fame. Their deeds, however, rank not as miraculous outbursts of genius, but take their place in the orderly procession of events which mark the evolution of man's growing dominion over ignorance and nature.

The knowledge of the diseases of women lay sleeping during centuries. The structure of society in Catholic Europe and among the Arabs, by the peculiar relations fixed between men and women, put a stop to all scientific and practical investigation. Even after all barriers were removed, the time was very long before a real gain was made. The time was ripe when Sims patiently began to work out problems which were essential to operative gynæcology. Even slavery had its uses in the pursuit of his ends. Who can tell how many more years the progress of the art might have been delayed, if the humble negro servitors had not brought their willing sufferings and patient endurance to aid in the furthering of Sims' purpose.

In looking at the after life of the successful surgeon, we are apt to overlook the struggles with many obstacles during the earlier years of his life. The soul of Sims must have been a supersensitive one. We know that beneath a quiet exterior there slumbered emotions which were the necessary accompaniment of his delicate cerebral organization. Such men do not go through life without many crosses. That tenderness which drew all men and women to him was the expression of an impressionable nerve tissue which reacted to the slightest touch of harshness as to a wound.

The life of Sims marked an epoch in medical history. He lived to see a new science born, to watch it grow into the perfection of exact beauty and proportion, and he died with dreams of great things yet to be done filling the chambers of his capacious mind.

After which Dr. J. M. Toner read a carefully-prepared biography of Dr. Sims, which appears in the first department of this number. The resolutions reported were unanimously adopted, and then this historical meeting in connection with Dr. Sims silently adjourned.

SANITARY DEPARTMENT.

THE RECENT ADVANCES OF SANITARY SCIENCE—THE RELATIONS OF MICRO-ORGANISMS TO DISEASE. Abstract of Address by HENRY O. MARCY, M. D., of Boston, President of American Academy of Medicine, New York, October 9, 1883 (*Journal of the American Medical Association*).

Sanitation can hardly be called a science. Many of its most important factors are, at the best, but imperfectly understood. The sanitary laws instituted by Moses are based upon principles which can not be under-estimated or ignored, the Egyptians for centuries previous had understood some sanitary ques-

tions and their solution better than ourselves. The traveller to-day may see in the elegant courts of the old Pompeïan houses the marble basins, with their leaden pipes and stop-cocks still seemingly ready to turn the treasured waters of the distant mountain into their old time-accustomed chambers alike to bath and fountain, and go again singing in joyous cadence, ministering to need and pleasure as they found their way through the once busy city to the bay below. Our modern systems of water carriage to remove sewage are but the adaptation of means to ends well recognized by the ancients, and it would to-day be difficult to find a better specimen of sewer or masonary than the Cloaca Maxima of old Rome. That age of Grecian prosperity and extraordinary intellectual activity, which gave to the world Pericles, Sophocles, Aristophanes, Pindar, Plato, Xenophon and Socrates, also furnished Hippocrates, the father of medicine. He it was who formulated the fundamental principles of sanitary science: "Pure air, pure water, and pure soil." The little island of Cos was his home, and here was located one of the most celebrated temples of the Asclepiadæ, or priest-physicians of the Greeks. If Hippocrates, living upon this pearl of the Ægean Archipelago, whose leafy groves were musical in the evenly-tempered balmy breezes which ever played in health-giving zephyrs, whose gentle rills were fed from springs gushing forth the distilled dews of heaven, whose verdant slopes, basking in the clear, warm sunlight, were kissed by the deep blue waves of the Mediterranean, the very place of ideal purity and loveliness, recognized the importance of such maxims, what should be their value to the multitudes crowded at the behest of commerce in localities selected without thought of sanitary surroundings?

The discussion of the problems of life, and the important factorage of ills thereto belonging, by the wise and thoughtful of the ages long ago, is not alone instructive, but has a fascination of its own. Whatever else may be said of Mohammedism as a code of morals and virtue, its cardinal principles of cleanliness and careful living deserve special recognition at the hands of science. The great plagues of the middle ages, and the desolations following the crusades which swept over Europe, were filth diseases of a preventable character. Although spurred into recognition by the bitter experiences of the passing generations, sanitary science is yet under only partial recognition of the laws, and a popular interest is scarcely aroused, even among our more intelligent classes of citizens.

The vital processes, in their sway over matter, hold the balancing between waste and repair. This hypothetical equilibrium is perhaps the best definition of health, and the safe removal of the waste, worn out material is one of the chief factors of sanitary science. This to the individual as ordinarily situated, might seem a question for easy solution. In the wide stretches of country surroundings, although there are many exceptions, this is generally true, but in the crowded conditions of city life there is no problem more pressing or complex. The law of decomposition is vital rather than chemical, and in the changes which ensue there are reproduced in the most marvelous abundance lower forms of microscopic vegetable life, which in their death-dealing danger are far more than the evolution of noxious gases. The relation between the house we occupy, its location and surroundings, its water supply and the best means of removal of potent waste, are as yet but imperfectly understood. The local causes in the production of disease are occupying in a greater degree at present than ever before the best scientists of the medical profession. Although many vital points are yet undetermined, great progress has been and is being made. It is sufficiently established that the water drank, which is contaminated with the specific infection of cholera, typhoid fever and other diarrhœal diseases, will at least in certain conditions of the system reproduce these diseases, and if these conditions are widespread, an epidemic will ensue. A similar law holds good with reference to

malarial or intermittent fever, although it is very probable the sources of contamination are not confined to the water supply alone. Heat, moisture, and the resulting decomposition are the seeming gross factors, but it is quite certain that minute living organisms introduced into the system are the potent factors in the production of these diseases.

The condition which this age of steam brings with its modern miracle of civilization, massing the population in great centres, gives new sanitary problems of a very difficult and complex character.

Surrounded by media from which there is even momentarily no escape, and which we must ever breathe, atmospheric impurities must be considered as of the highest importance. The air has no absolutely fixed normal composition; however, its two essential elements, oxygen and nitrogen, under ordinary circumstances, are so nearly invariable, they may be regarded as stable factors. Although, in a simple mechanical mixture, the air is very rarely free from carbonic acid and water, yet carbonic acid, so far as known, is a harmless, but superfluous agent to the animal economy; while, on the contrary, to the vegetable world it is food of the most important character. Some plants go through their entire period of evolution, dependent only upon this element and water. The mechanical admixture of water in the form of vapor is a constantly varying factor, dependent upon location, climate, temperature, etc., and, although rarely entirely absent, is of itself an element comparatively unimportant, but, combined with other factors, it makes possible the development of lower orders of the vegetable organisms, to which we are now warranted in ascribing some of the most dangerous and widespread diseases of the entire animal kingdom. In its indirect bearings upon climatology, influence upon heat, etc., atmospheric moisture is of the first importance.

In the analysis of air, ozone, from its admitted powers, especially in its bearing upon climate and health, should be carefully considered. It is an allotropic form of oxygen which has attained new properties of an intensely active character, supposed to have been chiefly produced by the action of electricity. Its molecular weight is 48, oxygen 32, and its density is about one and one-half times greater than oxygen. According to Houzeau, the maximum quantity of ozone in the air never exceeds 1-700,000 part of its bulk, and is often entirely wanting. More ozone is found during the night than the day; in winter than in summer; upon high rather than low lands; in country than in town; and most of all, after a severe thunder-storm.

Ozone owes its great value as a disinfecting agent to its exceedingly powerful oxidizing qualities. The compounds of ammonia, phosphorus and sulphur are acted upon with great rapidity, and the odors resulting from animal decomposition are removed instantly. It is probably destructive to all the minute vegetable organisms when in active development, but its effect in destroying the vitality of the spores of plants has not yet been determined.

Products of decomposition from cesspools, the organic exhalations from respiration, the lessening of oxygen from the combustion which is going on in brilliantly-lighted rooms, all these are dangerously infective and devitalizing elements, which demand a system of ventilation usually ignored in modern house construction.

From the address upon State Medicine before the American Medical Association at St. Paul, 1882, by Dr. Gihon, Medical Director, U.S.N., I quote, all too briefly:

"So long, however, as society in its highest development of rank and culture ignorantly jostles and wedges itself in contracted parlors and drawing-rooms, already defiled by blazing gas-jets and defective furnaces, where hundreds of lavishly-dressed human machines befoul the air and poison one another with the noxious gases and their own effete animal products in deadlier quantity than the

ragged rabble which herd in the open street, and call this pleasure; so long as godly people drouse and yawn in badly-ventilated churches, surcharging their brains and impairing their minds with blood not half ærated, and ungodly ones exhaust their whole reserve force to resist the insanitary influence of the no less badly-ventilated theatre and exhibition hall, and call the one pious worship and the other rational amusement; so long as men toil to amass riches and then build residences palatial, or sham palatial, and in the name of luxury and æstheticism flood them with artificial light and heat to consume the oxygen which prince and beggar must breathe, and admit the invisible filth by the sumptuously decorated closet and bath-room, by which they think to exclude the vile necessities of humanity which prince and beggar alike cannot escape, and call this comfort and refinement; so long as our children are sent to overcrowded and unwholesome schools, where their eyes are bleared, their hearing dulled, their plastic bodies distorted and their brains fuddled, and call this education; so long as men and women violate daily in themselves and in their children the simplest precepts of hygiene, parents countenancing half-dressed daughters wearing out their strength in unwholesome ball-rooms, seeking their slumber that cannot refresh only when dawn appears; sons launched upon the world to encounter physical wreck in a thousand channels where no beacon warns of danger; old men, senators, judges, divines, perchance learned doctors, uncomplainingly breathing the foul air of public conveyances and apartments in which every door and window have been carefully closed and ventilators carelessly ignored; streets reeking with filth which decrepit laborers play the farce of sweeping in broad daylight; what can State Medicine hope to accomplish in legislative chambers and halls of Congress which are themselves even evidences of sanitary ignorance, sanitary neglect, and sanitary indifference?"

The foreign ingredients of the atmosphere are very various; as dust they are carried great distances by the wind and deposited often hundreds of miles from their source. African organisms have been found in the air of Berlin. It is often difficult to obtain air free from the pulverulent débris of vegetation, and both vegetable and animal organisms abound. From the vegetable kingdom come pollen, vegetable hairs, fibres, scales, cells, seed capsules, spores of fungi and various forms of bacterial growths in marvelous abundance. In the air of living rooms we may find portions of food, animal and vegetable fibres, pus globules, fatty crystals, scaly epithelium, and a number of the micro-organisms.

Dr. Sternberg, in his report to the National Board of Health, says: "The fact, observed by myself, that during the summer months the mud in the gutters of New Orleans possesses an extraordinary degree of virulence, shows that pathogenic varieties of bacteria are not alone bred in the bodies of living animals. The more I study this subject the more probable it seems to me that in this direction lies the explanation of many problems which have puzzled epidemiologists, and that the sanitarians are right in fighting against filth as a prime factor in the production of epidemics; a factor of which the rôle is easily understood, if this view is correct. The presence of septic organisms, possessing different degrees of virulence, depending upon the abundance and kind of pabulum furnished them, and upon meteorological conditions more or less favorable, produces, in my opinion, the *epidemic constitution of the atmosphere*, which wise men were wont to speak of a few years ago as a cloak for ignorance. It must be remembered that the gutter mud of to-day, with its deadly septic organisms, is the dust of to-morrow, which, in respiration, is deposited upon the mucous membrane of the respiratory passages of those who breathe the air loaded with it."*

Owing to the multiplicity of agents and causes rendering air impure, its analysis has, as a rule, been very uncertain and unsatisfactory. The term

* Special Report to National Board of Health, April 30, 1881.

albuminoid ammonia, much used in the analysis of air as well as of water, has usually represented a whole series of unknown factors.

It was first noticed by Gay Lussac that all the nitrogen of organic matter, when heated with caustic hydrates, appeared as ammonia. Albuminoid compounds, when disorganized by the growth of the lower forms of organisms, set free ammonia, and the quantity of the free ammonia may, in a general way, serve as a standard to indicate the amount of decomposition which *has* taken place.

The term albuminoid ammonia, on the contrary, stands for the quantity of nitrogenous material in air or water which *may* serve as food for the growth of these infinitesimal organisms. This as yet undecomposed organic matter is not by any means in itself necessarily hurtful, although always objectionable. Combined with moisture at ordinary temperatures, it furnishes the condition for bacterial growth, and may prove sufficient for the development and spread of an epidemic of some one of the class of contagious diseases. We can have no chemical test for discriminating between hurtful and harmless organic matter, since the poisonous infection is *vital*, and where found must ever be looked upon with suspicion.

A proper discussion of the impurities in water would far exceed the limits of this entire paper. Chemically pure drinking water is neither necessary nor wholesome. Soaking into the earth certain mineral constituents must be present in varying quantity. These have long been recognized and may be easily determined. In all natural waters there is more or less organic matter in solution. This is reduced to the minimum in the supply from springs and deep wells properly protected. Organic material may not be harmful, dependent upon its character; dissolved vegetable material may deeply color the water, or the low form of algæ give it a very disagreeable taste without being especially harmful; on the contrary, clear, sparkling, tasteless water may contain impurities in the highest degree dangerous. Water containing albuminoids in solution, if allowed to become standing, is sure to undergo deleterious changes, from its infection by the ever-present atmospheric germs which utilize these products as food and reproduce in numbers utterly beyond conception. It is owing to such infection that the water draining from swamps and marshes, especially in hot climates, has ever been a prolific source of intestinal diseases.

As in the discussion of atmospheric impurities, we found the ever-present moisture an important factor, so in the treating of the water supply, soil pollution must be necessarily therewith taken into consideration. In this relation no question is more important than the power of the soil to purify water by filtration and the retention therein of injurious products. The albuminoid compounds may here be utilized as food for the higher order of plants, and thus be extracted from aqueous solution. Under the influence of sunlight oxidation destroys many of the lower growths, and air and water both thus become purified. It has long been recognized that certain soils in time lose their ability to filter out the impurities from polluted waters. Many cases of disease and even epidemics have been traced directly to the use of water containing sewage that had passed a greater or less distance through the soil. It is apparent that this danger has been greatly under-estimated by all classes. The specific contamination of the ground water, and thereby of the supply for household use, is the more common and wider spread source of some of our most dangerous diseases, the example of which best known is typhoid fever. It is also an established fact that the air which everywhere permeates all soils to the ground water moves in consonance with every barometric change of the outer atmosphere; these air currents, also modified by heat, are of importance from a sanitary standpoint. Every vault, every cesspool, is a source of pollution, and these sub-soil air currents are drawn into our cellars from all direc-

tions when they are used, as is the custom in most of our northern cities, as the source from which the heat in winter is distributed through the house.

The recognition of this danger caused the National Board of Health to institute a very elaborate series of investigations in order to determine the extent to which different soils are able to filter the injurious properties out of the air passing through them. The most interesting report upon "the relation of soils to health," by Profs. Smith and Pumpelly, can here only be referred to. Their conclusions show the utter worthlessness of sand as a filter for germinal matter. Our government in no wiser way could aid in the general well-being of her citizens than by the continuation of such investigations.

"The facts here brought out seem to us of importance, considered with reference to the sources of supply of our drinking waters; the relative location of wells, cesspools, etc., in our towns; and also with reference to the methods of removal of excreta, especially during the prevalence of an infectious disease, the infectious materials of which may be communicated through water. A good bed of sand has commonly been regarded as one of the most efficacious forms of filters, amply protecting our well water against all contamination, even though the wells be sunk at no remote distance from sewers, cesspools, cemeteries, etc. But we see that sand utterly fails to remove germs of putrefaction, such as are normally found in the air and in water from liquids, while its power of absorbing dissolved matter, organic or inorganic, must also be seriously questioned." *

The subject of germ transmission through the soils demands on the part of sanitarians the most searching investigation, not only on account of the possibility of contamination of our drinking waters through infiltration of germs, but also because the air, especially in our dwellings, may become infected if the soils in their natural condition possess no power of retaining germs or their adult organisms. For whenever in an infected soil the ground water from any cause rises to the surface, germs may be carried with it, and upon drying be taken up by the atmosphere.

The importance of a supply of pure drinking water cannot be overestimated, and its pollution is in a very large degree due to germ contamination. This is no exception even is sparsely settled-country districts. In New England, almost entirely exempt from malaria, the danger from specific contamination of the drinking water is shown in the marked increase of typhoid fever. In Massachusetts alone there occurred from 1840 to 1880 390,000 cases of typhoid fever and 40,000 deaths.

In the military service during the late bloody conflict between the States, zymotic diseases caused a larger number of deaths than resulted from all the battles of the entire war. We quote from the report of the Surgeon-General: "The entire number killed in battle and died as the result of wounds was 93,443; died from disease, 186,216; died from zymotic diseases alone, 108,666." If to these hecatombs of victims, sacrificed in the vigor of early manhood, we add the suffering represented by over 1,700,000 reported cases of diarrhœa and dysentery, and 1,100,000 cases of malarial fever, every village and hamlet of our broad domain still having its representatives of wrecked humanity from these causes, we gain some idea of the dangers resulting from insanitary conditions, although our armies were in service in a mild climate, and the best clothed, fed and housed soldiery the world has ever seen.

The number of deaths in the United States in 1880, from diphtheria alone, was 38,398, a proportion of 51.33 per 1,000. From typhoid fever there occurred 22,905 deaths, a proportion of 31.21 per 1,000.

These terrible scourges, like consumption, are the messengers of death which make their daily visitations, and to which people have become so accustomed as to regard their ravages as the inevitable, or, as the clergy have been wont to

* Supplement No 13, National Board of Health Bulletin p. 18.

express it, "the hand of Divine Providence laid heavily upon us." The medical profession talk learnedly of the wise means adapted to the cure. Different schools of pharmacists have their vaunted remedies, but the sad, humiliating lesson of the mortality tables teaches that these invisible monsters are stalking broadcast over the land, seizing prince and beggar alike in their remorseless grasp.

The laborious researches of our distinguished friend, Dr. Henry I. Bowditch, in establishing the relation of soil moisture to consumption, builded for himself a monument more grand and enduring than granite or bronze. The ineffable something, of the existence of which he was equally sure, remained for younger eyes to discover, and the patient, painstaking labors of a well-trained German student to demonstrate, the specific bacillus tuberculosis.

It is very probable no publication of modern times has awakened so much discussion or caused the undertaking of so great an amount of study and investigation.

The fundamental basis of all sanitary law, and I may say also of the treatment of disease, lies in the acquisition of such causative knowledge. The application of sanitary law to city life must demand an atmosphere reasonably free from the defilement of organic waste. This necessitates a system of sewerage which shall continue from the house, in a steady unbroken current, to its discharge at a safe distance from habitation. This current should be of sufficient rapidity to prevent sedimentation, and deliver the house products before time sufficient for putrefaction, even in summer, has elapsed. This can never happen in the systems now in use in those cities situated upon the seashore, since here the sewers are practically tide-locked a large fraction of the day, and a cessation of current with sewerage deposit must ensue, while a backward pressure is necessarily produced upon the sewer air, which, loaded with organic products, must escape into the house through any one of the water traps now in use.

Sewer-gas poisoning, which means air changed not so much in its chemical constituents as defiled by organic impurities, is thus by no means in our best-constructed houses a hypothetical danger, here often the greater, for the costly luxuries of water closets and basins are each a standing menace, and are to be regarded with suspicion. Boston, which has and yet continues to drain into its back bay and harbor its sewage by more than fifty outlets, is upon the eve of inaugurating its new system at an expense of nearly $5,000,000, by which the sewage is to be pumped into a storage reservoir situated upon Moon Island, and discharged into the outgoing tide, and thus protect the harbor from defilement by sewer drainage.

The wise political economist and world-renowned historian, Mr. George Bancroft, in discussing the future of civilization, once said to me: "I look upon New York City as the future commercial metropolis of the world, a great centre of ten or fifteen millions of inhabitants." This prophecy of years ago has gone on towards steady fulfillment, until, like London, she exacts tribute from the entire world. Situated upon a narrow neck of land between a mighty river and a deep bay, it would seem that good soil drainage would be most easily secured; and yet her sanitary authorities state that the imperfect, incomplete and broken sewers have caused the soil of whole districts to become so charged with sewage that the saturation point is reached. Nearly four millions of people pour their waste into the river and harbor, as is most convenient, while miles of her shores are fringed with wooden wharfs built upon piles, not alone themselves undergoing decay, but a fertile source of detention of putrefying material. The New York physician will tell you that, no matter what disease he has under treatment, it is with the added factor of malaria from such defilement. Rich and poor must alike suffer from such danger, and if the prophecy of America's

distinguished scholar is to be fulfilled, New York must take her sewage out of the harbor, and rival Liverpool with docks of solid granite for the merchandise of the globe.

The water supply must ever be pure and ample. The extraordinary expenditure necessitated by most cities has made water a costly product. Rivers and lakes in sufficient proximity for such use are liable to defilement from suburban towns and manufactories, and only by the greatest vigilance can pollution be prevented. Boston has freely expended her millions upon a water supply confessedly inadequate in amount, and of a character which is a constantly recurring source of complaint and danger. Much of her water supply is retained in artificial shallow storage basins, from which the surface soil was never removed, and whose water-shed comprises a very considerable population; and Natick, with its 8,000 people, still drains its waste into Lake Cochituate, the original source selected for the city supply.

The Board of Health returns for Boston, August, 1883, out of a total of 521, gives from zymotic diseases alone 194 deaths, while 135 cases of typhoid fever were reported.

For September, a total mortality of 765, there were 253 deaths from zymotic diseases, and 215 cases of typhoid fever reported.

With astonished gaze the traveler views the great arches spanning and crossing the Campagna, which once bore to old Rome the pure waters of the distant Albian mountains. The last generation of scant population, with singular energy and foresight, at the behest of commerce, wedded by a waterway, more than three hundred miles in length, the great lakes with the Hudson River. The twentieth century will exhibit yet greater marvels for the securing of pure water. The project is already under discussion to supply the great metropolis from no nearer source than Lake George, with the thought of protecting its water-shed from further pollution, and carrying its pure, sparkling water to the thirsty city at an estimated expense of no less than two hundred millions of dollars.

The danger from the dead must not be forgotten. As we invite our friends to sympathize in our sorrow, let it not be to their peril. Revive, if need be, the custom of Egyptian preservation, or reinaugurate the use of the Roman funeral urn, but do not sow the seeds of an epidemic of the ever-prevalent contagious diseases by our present display of decomposing remains, adorned as if for a reception. Let the genius of some sanitarian devise a casket, at once hermetically sealed, rather than do violence to time-honored custom or shock the deepest and most sacred feeling of broken hearts by urging cremation. The public health act of Great Britain makes the holding of a "wake" over the body of one dying from contagious diseases subject to a fine of five pounds. Let American authorities equally protect from similar dangers.

We turn reluctantly from the consideration of questions having so great and vital an interest to the medical profession, and of primary importance to the entire animal kingdom. If Rip Van Winkle experiences be granted to us in the twentieth century, with little aid of the prophetic power, we may forecast some of the advances then made known to us of our science. In the light of past history, with its fashions and foibles of the *medicamenta*, few would presume upon the mission of its pellets and powders.

Surgery and sanitary science are, however, based upon entirely different factors of our knowledge, and must remain the great cornerstones of a divine art, as wide-reaching as humanity. Upon these shall be builded the grand Æsculapian temple of the future, where will be taught a science foreshadowed in the deeds of the great Galilean Master.

The citizen must not be lost in the physician. A Republican Government demands service of all. As turned from the motley crowd in Castle Garden I

shuddered at the thought that these men were so soon to be my peers in our government, but the bright-eyed children, hiding in the scanty skirt of the mother, looked hopefully up, as if to say, "Welcome us in our escape from the oppression and overcrowding of the centuries." Then came the vision of our broad domain scattered all over with school-houses, academies and colleges. Rosy-hued with health, in youthful vigor, our women in tens of thousands have devoted their best years to the training of the young. Four hundred American colleges and universities with open doors invite to a higher education. Universal knowledge is the Republic's only safety, and further needs have only to be made known to be liberally met by the generosity of the American people. The necessity for research and pure science are recognized as never before, and may the day soon come when our youth will no longer require for their best development and higher education, European training.

Be it our bounden duty as physicians to disseminate to the masses proper instruction in the cardinal virtues of right living, and to demand from our government wise sanitary laws, both State and national, in the enforcement of which every house shall be builded and maintained as sanitarily safe as architecturally; rich and poor alike abundantly supplied with pure air and water, and have their habitation upon an uncontaminated soil.

Death-Rate in Foreign Cities.—It appears, from statistics published in the Registrar-General's return for the week ending January 8, that the death-rate was recently equal to 21.9 per 1,000 in Bombay, and 36.1 in Madras. Small-pox caused 34 deaths in Madras, where "fever" fatality was also considerably greater than in Bombay. According to the most recent weekly returns, the average annual death-rate in twenty-two of the largest European cities was equal to 24.3 of their aggregate population; this rate was 2.7 above the mean rate last week in the twenty-eight large English towns. The rate in St. Petersburg did not exceed 22.9, showing a further decline from the rates in recent weeks, although the 408 d aths included 28 fatal cases of diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the mean death-rate was only 19.3, the highest rate being 25.2 in Stockholm, where the 88 deaths included 8 from diphtheria and croup, and 6 from scarlet fever. In Paris, the rate was 22.6, and the deaths included 43 from diphtheria and croup, and 32 from typhoid fever. The 183 deaths in Brussels, of which 8 were fatal cases of small-pox, were equal to a rate of 22.8. In Geneva, the 31 deaths gave a rate of 23.1. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the rates ranged from 18.8 in the Hague to 27.0 in Amsterdam, the mean rate in the three towns being 25.4; in Amsterdam, 26 deaths were referred to croup, and 12 to measles. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 25.8, and ranged from 21.4 and 21.9 in Hamburg and Buda-Pesth, to 30.1 in Munich and 32.1 in Prague. Small-pox caused 24 deaths in Prague, and diphtheria 80 in Berlin and 26 in Dresden; measles showed fatal prevalence in Hamburg, Vienna, and Munich. The rate was equal to 23.3 in Rome, 24.2 in Turin, and 28.2 in Venice, the mean in these three Italian cities being 24.6; 11 deaths were referred to malarial fever in Rome, and 8 and 6 deaths respectively to measles and typhoid fever in Turin. The 132 deaths in Lisbon, including 5 fatal cases of diphtheria, were equal to a rate of 32.9. In four of the principal American cities, the mean death-rate was 20.9; the lowest rate was 17.9 in Brooklyn, and the highest (22.4) in New York. Typhoid fever caused 15 deaths in New York, 12 in Philadelphia, and 7 in Baltimore; diphtheria showed more or less fatal prevalence in each of these American cities.

Doctors' Mistakes—The Wrong Chart.—It has often been said in jest that

"doctors make mistakes the same as other people, but there are no living witnesses to the fact." The members of the American Public Health Association know differently, and one of them will never forget it.

Among the papers read were two or three on malaria, and one of the readers, a prominent surgeon in the United States army, whose paper was a compendium of the reports of surgeons at the 212 military posts of the country, had prepared two charts or tables of statistics, the better to impress his facts upon the minds of the members. They showed the rainfall, mean temperature, number of cases, percentage of the population suffering from the disease annually, etc., one of them embracing a range of posts along the Atlantic seaboard from Maine to Florida; the other a range of posts from the headwaters of the Missouri to the Gulf. These were tacked up, one on either side of the stage, in full view of the audience, but not of the reader upon the stage.

The paper finished, and discussion of its contents being in order, a doctor from one of the Atlantic States took the floor and declaimed upon the healthfulness of his section of the country as compared with the West, especially Texas and Kansas, which he declared to be singularly subject to malaria, inasmuch as there is comparatively little marsh land in those States. He evidently knew what he was talking about, and, as he spoke fluently and forcibly, was listened to with marked attention.

An hour later, and while the subject was still under consideration, the army surgeon was seen to approach the chairman and whisper to him.

"Gentlemen," said President Hunt, as he rose from the chair and addressed the audience, "that there may be no misapprehension of the facts, I desire to state that, through a mistake in the selection of the charts, the one upon my left shows the proportionate amount of malaria in the Atlantic States, while that upon my right shows the amount of Texas cattle fever in the Western States.

There was no roar of laughter, but many eyes twinkled with merriment, and one very red-faced doctor shortly afterwards meandered out into the corridor and disappeared.—*Detroit Free Press.*

THE claim is made for Cleveland, Ohio, that it shows a lower proportional death list for 1883 than any other city in the Union.

PHILADELPHIA'S DRINKING WATER.—It is now about fifteen months since the Schuylkill water was pronounced by physicians unfit to drink. During the whole of last winter, while the ice covered the stream, even the odor of it was so offensive that it produced sickness. On analysis one-sixth part was found to be sewage. Melted snow, ice, spring water, imported by private enterprise, mineral waters, wine, gin, and whiskey were substituted by housekeepers for the genuine article. After waiting for more than a year for some motion for their relief, the citizens are informed that "the Water Department is now going to inquire into the amount of refuse matter emptied into the Schuylkill." The inspection has just begun at Pottsville, at the very top of the river, and the leisurely progress of the inspectors down to town will consume about a month, when "an official report will be made to Chief Engineer Ludlow, after which he (the Chief) expects that Councils will adopt some method to abate this great nuisance.—*Philadelphia Press, Jan.* 3.

PURIFICATION OF SEWAGE.—Experimental trials of the Andrews-Parker process for deodorizing and purifying the sewage of London have been in operation since last May. The 90,000,000 of gallons daily and nightly flows into subterranean reservoirs located beyond Beckton. By the action of water and repeated pumping before the last station is reached all the fecal matter in the sewage is reduced to a liquid having a grayish-black appearance and an extremely offen-

sive odor. The sewage, after having been drawn into a tank, is subjected to a powerful stream of water, under heavy pressure charged with ground clay, caustic soda, hydrochloric acid, and sulphate of iron. The mixture is then turned into large tanks, where it is allowed to remain until the action of the precipitates has thrown all the sediment to the bottom, when the liquid is drawn off into the Thames, it being a pure, colorless, and odorless water. The sediment is kiln dried and pulverized, and makes a fertilizer which chemical analysis has shown to contain a large proportion of ammonia and phosphates, and to be of much commercial value.

Boston's Sewerage Experiment.– The public will follow with interest Boston's experiment of leading its sewage into deep tide water. This morning the pumps will be set in motion at Old Harbor Point, the final discharge being at Moon Island. The entire cost has been $4,544,272, and the building of the sewerage is spoken of as "one of the greatest engineering feats of the age." It may seem a little hypercritical to express a regret on this inaugural day of great enterprise that Boston did not see fit to include in its plans all the possibilities in the case. London has taught the world that a nuisance can be turned into a profitable product available for agriculture. The market gardeners about the city eagerly take up all the sewage fertilizers turned out at the London works, and find them even better than what they buy in the market. At Pullman, the infant city of Illinois also, the revenue derived from the sale of the manipulated sewage is a good and fair interest upon the money invested in the works, to say nothing of the incalculable benefit to the community in the solution of a serious difficulty. A glance at the North Cambridge and Arlington meadows, and in fact the market gardening section of Middlesex County, ought to satisfy any one as to the extravagance of the policy which dumps the refuse of a great city into the sea. It is an open question, moreover, whether the "deep tide" will take and hold this sewage. Nantasket and the contiguous beaches may have occasion hereafter to thank Boston heartily for perfuming the surf and giving a new value to their bathing privileges. Of course, the present works need not be abandoned, even if they prove to be a nuisance. The pumping station can be turned into a fertilizing factory, but the roundabout way of getting at it will certainly be very expensive.—*Springfield Republican, Jan.* 1.

Experiments with the Sputa of Phthisical Patients.—M. Vignal has been trying some experiments with the view of ascertaining whether the sputa of phthisical patients as found in the streets still contained bacilli. He collected a certain quantity of such sputa and submitted it to desiccation; he then moistened it and let it dry again at different times, so as to place it as much as possible in the condition in which it would be found in ordinary circumstances in a room. He discovered that the sputa thus treated contained bacilli as numerous and as well formed as if they had just been expectorated. He inoculated two guinea pigs with the matter; one of which died in a few days from obstruction in the bowels, and he could not in consequence come to any conclusion; but the second animal, though it increased in weight during the first few weeks subsequent to the injection, afterwards began to lose flesh and died in about three months. At the autopsy it was found that in all the organs there was a great number of tubercles which contained bacilli. M. Vignal concludes that sputa of phthisical patients, as found on the ground in the streets or in apartments, are far from being inoffensive, and might become agents of contagion to person predisposed, or in whom the bacilli would find a favorable soil for propagation.

PHARMACY AND THERAPEUTICS.

CONVALLARIA MAJALIS (LILY OF THE VALLEY).—Dr. Edward Drummond, of Rome, writes to *The British Medical Journal* (see No. 1,194, November 17, 1883, p. 970) that he has lately met with an account of the use of this drug, in cardiac disease, as far back as the commencement of the seventeenth century, in an old Italian book of *Commentaries on the Materia Medica of Discorides*, by Dr. Pietro Andrea Matthioli, published in Venice in 1621, and Dr, Drummond gives the following interesting translation :

"The Germans use lily of the valley to strengthen the heart, the brain, and the spiritual parts, and also give it in palpitation, vertigo, epilepsy and apoplexy; also as a remedy for the bites and stings of poisonous animals; to quicken parturition, and for inflammation of the eyes. For this purpose they are wont to prepare the wine from the flowers at the time of the vintage, and then infuse them in old wine for forty days in the sun, and subsequently distill and re-distill (but not many times), along with lavender flowers, rosemary and other aromatics. They then preserve it as one of the most precious things to be found amongst medicines, and they call it "aqua aurea," and preserve it, in vessels of gold and silver, against sudden attacks. They even believe that, given to persons actually *in articulo mortis* it is able to prolong life for several hours. In this, however, they are not unfrequently deceived, as I have myself witnessed."

In the above translation it must not be taken for granted that the words "distill and re-distill" had their present meaning, for it is highly probable that they had not. Referring to Richardson and other authorities, it will be found that "to separate drop by drop," was formerly taken in a different sense, and had no necessary relation to rising in vapor and being condensed, or even to heat in any form. By the quotations given in Richardson, its present signification from some former more literal one can easily be traced, and in this translation it should probably be read as "percolate and re-percolate" after the forty days' maceration.

Hence, it is probable that convallaria has been continuously used in medicine for several hundred years, and that its action on the heart has been long known. Its more modern and rational use in medicine, however, does not date back, so far as the writer knows, further than a paper on the subject by Professor Germain Sée in the *Bull. Thérap.*, for July, 1883.

In connection with M. Hardy its physiological and therapeutic action were both investigated at length, and very important and definite results were reported. Its effects on the heart and arteries, although similar to those of digitalis, were not identical, and were not produced in the same way, while it was free from some of the inconveniences and disadvantages of digitalis. It was not cumulative and explosive as digitalis was reported to be. It did not interfere with digestion, but was perfectly well borne, the appetite rather increasing under its use, while the intestinal action was also improved. The diminution of the heart's frequency, under normal conditions, amounts to 10 or 15 beats per minute. Irregularity, especially of nervous origin, is lessened. Sensations of pulsations in distal vessels—*e. g.*, in the head—are removed by it. At the same time the force of the cardiac action is increased. It has a powerful diuretic action, increasing the amount of urine to about three times its previous volume. (From *The Lancet*, August 26, 1882, p. 327.)

This paper attracted considerable attention, and was soon followed by others in France, Great Britain and this country. All agreed upon its potency as a cardiac agent. Some regarded it as an equal, and others as an inferior duplicate of digitalis. Some found it diuretic, others not at all so, while in a very

considerable number of the trials the results were negative until toxic doses were used. Long ago it had yielded to chemistry two glucoside principles of very different and somewhat antagonistic action, and these, convallarin and convallamarin were used separately, and the latter was alleged to be the cardiac agent, but with these also, discrepant results were obtained. In a year from the time of Prof. Sée's paper it seemed doubtful if convallaria was not a mere duplicate of digitalis, with the great disadvantage of being by no means so well studied or so well tried, yet stimulated into use by fashion and novelty, and by advertising.

If only a simple duplicate of digitalis, the already overloaded materia medica was much better without it. But if it differed materially in either quality or quantity of action, and was more free from collateral disturbance, the materia medica could not afford to lose the chances offered by it.

At about this period of its career the writer received a note from a very careful and close observer, saying that he considered it a valuable agent, which could not take the place of digitalis in his hands, but which had a place of its own to which digitalis had been applied, but to which it was less applicable, and asking the writer to make a preparation of convallaria for critical trial. This was in the early spring of 1883, and there was no part of the plant to be had in this market. From the character of the plant, and from various considerations developed by the uses of the extract from its various parts by M. Hardy and others, the writer concluded that the root, if taken at the proper time, would be by far the best portion of the plant for medicinal use, and that a well-made fluid extract of the root would be far the best representative of the drug—far better than the so-called active principles which, when divorced from each other—if not made by—chemistry, were found to yield such discordant results.

A florist was found who had some fine beds under cultivation, and when the roots had fairly sprouted they were taken from the ground, cleaned and dried by a gentle radiant heat. In drying they lost just about 75 per cent. of their weight, this loss not varying more than 1 to 2 per cent. in four separate parcels. The dried root and sprouts were then ground so as to pass through a sieve of 20 meshes, and were made into a fluid extract which represented the dried root minim for grain.

As a rule, cultivated plants are not as active, medicinally, as wild ones, but this was the best that could be done. The menstruum used for exhausting the root at first proved not to be a good one, and yet this fluid extract, in the hands of several good observers, proved moderately effective, and some discrepancies in the published statements were shown to be probably due to the use of preparations of different makers, or of different materials.

Specimens of this fluid extract were sent to several good observers, and in course of a few months results were obtained which, although not fully sustaining the character of the drug, were yet sufficient to warrant a more extended usage. By this time a parcel of foreign wild flowers and flower stalk had arrived. These were made into fluid extract with a different and better menstruum—namely, the diluted alcohol of the U. S. P. of 1880. It was, however, pretty plain from the sensible properties that this was not so active nor so good a preparation as that from the root, and therefore that the root collected at sprouting should be preferred. A very few therapeutic trials seemed to confirm this opinion, and by this time some foreign root arrived, was made up and distributed, and the supply of this has now been kept up for several months to all who apply for it, thus gradually extending the number of those who were using this preparation, and adding them to the much larger number of those who were using the preparations of other makers, and who had used these long before this writer took up the subject.

Up to this time several competent and careful observers, free from the

prejudice of novelty, and from the still more dangerous prejudice of basing general conclusions upon too few cases—have reported their experience in a guarded way. This experience is still discrepant, and therefore difficult to state, so that perhaps all that can be safely said is that the general kind and direction of the results show that convallaria is worthy of a more extended use before it can be either fully accepted or discarded. It may be pretty definitely said that it is not a simple duplicate of digitalis, nor is it adapted to supersede that important agent in any large number of cases. Yet its use may serve to differentiate or discriminate between cases which have hitherto been classed together and all treated by digitalis, because there was no other agent that was applicable to any of the class.

If the uncertain indications from the use of convallaria thus far be not mistaken, the best that can be hoped from it is that it may materially aid physicians in splitting up the digitalis class into groups, some of which may be better managed by convallaria. It is also among the possibilities, if not among the probabilities, that it may prove either or both a substitute and adjunct to digitalis. There are many conditions in which digitalis fulfills all the indications required of it, but in which it cannot be continued in sufficient doses to maintain the good effects without disturbing the stomach and thus interfering with nutrition. In such, or in some of such cases at least, it may serve as a substitute or alternate. In other conditions which seem to indicate the effects of digitalis, but in which that agent does no good, or cannot be tolerated, convallaria gives a chance of relief where there may have been less chance without it.

Two or three years of careful observation, in good hands, extended over large numbers of cases, without prejudice, and with earnest investigation, will be absolutely necessary to establish the true and lasting character of convallaria, and it is this consideration which induces the writer to add his supply of a well-made fluid extract from good material to those of other makers who long preceded him in supplying it.

The dose of convallaria is, of course, the quantity which will give the special or physiological effect, and this will be different in different cases. But the dose to begin with, and that which will be effective in some cases, is about 24 grains in the twenty-four hours. And as the fluid extract represents the drug minim for grain, the dose of that will be as many minims—say 6 minims every four hours, or 8 minims three times a day—the size or the number of the doses to be increased until some effect is obtained.

The fluid extract is miscible with water, and though it does not make a clear solution, the precipitate which settles out is probably, but not certainly, inert. A good way to administer it is to put a measured quantity in a wineglass and add as many teaspoonfuls of water as may make up the number of doses required when given from the same teaspoon. For example, a fluid drachm is measured into a wineglass, and seven teaspoonfuls of water, or wine, or diluted alcohol are added and the mixture well stirred. Then using the same teaspoon, and stirring well at each dose, if water be the diluent, it is given in teaspoonful doses, which will be nearly eight minims each, further diluted if desired at the time of taking it.

If the drug is to have a fair chance, there can be very little doubt that a well-made fluid extract of the root collected at the proper season is the best form in which to use it. In all drugs, the active principles of which are neither alkaloids nor acids, but are of that indefinite class called glucosides for want of a better generic name, it is pretty certain that these glucosides do not fully represent the drugs—nor even well represent them. And when two or more glucosides are obtained from the same drug, the doubt is much strengthened. No one knows—be he ever so good a chemist—where the molecules of complex

organic substances will split until he tries them, and therefore what he gets is often empirical, and may be the result of his chemical process, so that a different process may give different results. For example, Walz, in 1858, obtained from convallaria two glucosides which he named "convallarin" and "convallamarin." Dilute acids again split both of these into other bodies by subtracting a molecule of sugar, and one of the resulting bodies, minus half a molecule more of sugar, leaves the formula of the other original glucoside. Hence the inference that neither convallarin nor convallamarin exists in the plant, but that they are the result of splitting-up of more complex molecules by chemical means. No one has ever proved that either of them pre-existed in the plant, while the physiological action of the plant is not represented by the action of the two glucosides as given.—*Squibb's Ephemeris, Jan.*, '84.

Pain Killers.—*New Idea* gives the following as the composition of two of the much-advertised "pain killers:"

1. Richter's Pain Killer.—From 100 parts of capsicum make 600 parts of tincture; add a solution of 22 parts of soap in 100 of water; add:

Water of ammonia	300 parts.
Camphor	30 "
Oil of rosemary	10 "
Oil of lavender	10 "
Oil of thyme	10 "
Oil of cloves	10 "
Oil of cinnamon	1½ "
Sugar coloring	q. s.

Mix and filter.

2. Perry Davis' Pain Killer:

Myrrh	2¼ lbs.
Capsicum	10 oz.
Opium	8 "
Benzoin	6 "
Guaiac	3 "
Camphor	10 "
Alcohol	5 gals.

—*New Remedies.*

Koroniko.—Dr. J. Jardine, writing from Kiukiang, in the "Chinese Imperial Maritime Customs Medical Reports," says that dysentery, acute and chronic, was very prevalent in that community during the autumn of 1880. Acute dysentery had generally become sub-acute or chronic before the patients applied at the hospitals, so that the chronic form had generally to be dealt with. "As every one knows, these are the difficult cases to influence speedily by drugs, and with the Chinese a change of air or sea voyage is beside the question. In these cases I was induced to try *koroniko*, from the *Veronica parviflora*, which is largely used in New Zealand as a remedy in dysentery and diarrhœa, and some of the results exceeded my most sanguine expectations. Many who received the drug did not return to report themselves; but I have notes of three cases of chronic dysentery, varying in duration from six weeks to four years, and voiding from twenty to thirty motions containing blood and mucus daily. Fifteen doses of tincture of koroniko reduced them to one-half, other fifteen doses reduced them to three or four daily, and a third like quantity effected a complete cure. Judging from the few cases I have been able to follow, I augur a brilliant future for this remedy in the chronic forms of the disease."—*Practitioner, Quarterly Therap. Rev. July*, 1883.

Coffee and Tea.—Perhaps the most brilliant address which has yet been delivered at the Parkes Museum since the evening lectures have been inaugurated was that given by Dr. G. V. Poore, on December 6th. Sir Henry Thompson occupied the chair, and amongst the audience were to be seen Dr. Russell Reynolds, Mr. Berkeley Hill, Professor Corfield, and other distinguished medical men. The subject chosen by the lecturer was "Coffee and Tea." After stating his belief that stimulants, both alcoholic and alkaloidal, had their uses, and that we ought to be very sure of our ground before we attempt to override appetite by dogma—as the Mahommedans had done—Dr. Poore proceeded to contrast "Coffee with Tea." The cup of coffee, provided it were genuine, contained more alkaloidal stimulant than the cup of tea, and owing to the absence of tannin the action of coffee was more rapid than that of tea. The specific gravity of a cup of tea was about 1,003, that of strong coffee 1,009, and of café-au-lait, sweetened, 1,035. Tea was more of a pure beverage than coffee, and hence it was possible to use it as a mere luxury, for it required scarcely any digestive effort, did not "cloy" the palate. The danger of excessive tea-drinking lay mainly in the large amount of astringent matter. This was a most potent cause of dyspepsia amongst women of the sempstress class, who frequently consumed tea which had been boiled. When the system stood in need of a stimulant there was nothing equal to a cup of strong coffee; and if it were desired to wean the drunkard from his spirits a real stimulant must be supplied, and not the sickly, bitter, unwholesome stuff which was called "coffee" in this country. In order to make good coffee the berry must be fresh roasted and ground. There was no difficulty whatever in roasting coffee, and this ought to be part of the daily routine of every well-regulated household. It was important to use enough coffee; one and a half to two ounces of coffee to a pint of water made a first-rate beverage. Elaborate coffee machines for grinding were by no means necessary. If the coffee required for breakfast were put into a common earthenware jug overnight and cold water poured upon it, it might be heated to the boiling point in the morning by being allowed to stand in a saucepan of water over the fire. Violent ebullition was thus avoided, and the aroma was preserved. Chicory and other allied bodies are in no way substitutes for coffee, for they possess no stimulant properties. Out of ninety samples of ground coffee purchased in London shops only five were found to be genuine. This adulteration had been pointed out by *The Lancet* Special Analytical Commission thirteen years ago. Coffee "mixtures" made an infusion of high specific gravity, and tended to derange the stomach. A well-sustained discussion followed, in which heads of well-known city firms took part. The meeting concluded with votes of thanks to the lecturer and to Sir Henry Thompson.

Distilled Water for Eye Lotions.—In the London *Practitioner*, Dr. Paul M. Chapman takes the ground that distilled water is not, in all cases, the best vehicle for eye lotions: He says: "I have tried the experiment on myself and on many of my friends, and the answer is always the same, viz., that the introduction of distilled water into the eye is attended with much discomfort and smarting, while with normal saline there is no noticeable effect whatever. . . . The practical deduction is this, which I have also verified, that the addition of two grains and a half of chloride of sodium to the ounce of distilled water renders any lotion intended to be of a soothing character much more beneficial."

Yellow Oxide of Mercury in Ophthalmia.—Dr. Jonathan Hutchinson says, since he has come to appreciate the value of yellow oxide-of-mercury ointment in the treatment of chronic inflammations of the eye, he has been able to abandon almost entirely the use of blisters, setons, and like painful measures.—*British Medical Journal.*

Solubility of Uric Acid.—An accumulation of uric acid in any part of the body brings with it serious results, among which may be mentioned gout, stone, gravel, etc.

The usual method of removing such deposits consists of the free use of alkaline and mineral waters.

Jahn tested the solvent power of a series of salts in solutions of 1 part to 200 water. He found that one part of lithium carbonate would dissolve 3.51 parts of uric acid. Next in value to this are sodium bicarbonate (baking soda), sodium monocarbonate (sal soda), and borax, which dissolve 1.25, 0.98, and 0.83 part of uric acid respectively. The benzoate of lithium and borocitrate of magnesium have very slight solvent powers; sodium and chloride and sulphate and lithium chloride had no effect upon it.

Experiments were also made with natural mineral waters (European), with the following results:

200 c. c. of	Vichy (Grand Grille) dissolved.....	0.765 grm.
"	Biliner sauerbrunnen.....	0.587 "
"	Carlsbad sprudel.....	0.546 "
"	Ems krahnchen.....	0.515 "
"	Marienbad (kreuzbrunn).....	0.471 "
"	Wiesbaden (kochbrunn).....	0.243 "
"	Distilled water, dissolved.....	0.0214 "

These experiments prove that the carbonates alone, both of the alkalies and alkaline earths, increase the solvent powers of mineral waters over uric acid. Also that when sufficiently diluted their solvent power is directly proportional to their percentage of these salts.—*Arch. Pharm.*, xxxi., 511.

"Rex Magnus" and "Venetian Red" as Food Preservatives.—Dr. G. H. Bartley, the analytical chemist of the Brooklyn Health Department, has submitted a report to Commissioner Raymond, M.D., on the qualities and dangers of these substances as food preservatives. There are several well-authenticated cases, the report says, of poisoning from their use. "Venetian red" is used by bologna sausage makers to keep the meat free from taint, and to give it a bright color. "Rex magnus," Dr. Bartley says, he has found to be used extensively to preserve milk and other articles. It is composed principally of borax and boracic acid. The quantity required for the preservation of milk is such as to give to each quart of milk about ninety grains. It is tasteless and odorless. As a child one year old will consume a quart of milk in twenty-four hours, it is unsafe to allow the use of the preservative. The Doctor says stale milk may often be sent to market that has been kept by the use of this preparation two or three days.

Health Commissioner Raymond issued an order prohibiting the use of these materials in articles to be sold for human food.—*Sanitarian.*

An Expensive Drug.—The most expensive drug in the market at present is ergotinin, the German preparation of which costs 200 marks (£10) a gramme (15 grs.), while a milligramme (1-70 gr.) of the French preparation in solution costs 1½ mark (1s. 6d.)—*Wien. Med. Blätter.—London Medical Record.*

Typhoid Fever and Ether.—A French physician has published five cases of typhoid fever treated by subcutaneous injections of ether, which he considers as the best mode of administering stimulants in the adynamic forms of the disease. Two injections of twenty drops each time were made daily, and under its influence the patient was aroused and delirium ceased. In pneumonia, these injections are of the greatest utility, as they are in every malady assuming a typhoid form.

Bleaching Sponges.—The following process was, says *New Remedies*, devised by Mr. John Borham, and has been in use in Bellevue Hospital for a considerable time :

Soak the sponges, previously deprived of sand and dirt by beating and washing, in a one per cent. solution of permanganate of potassium. Then remove them, wash them thoroughly with water, and press out the water. Next put them into a solution of one-half pound of hyposulphite of sodium in one gallon of water, to which one ounce of oxalic acid has been added, and leave them in the solution for fifteen minutes. Finally, take them out, and wash them thoroughly.

By this treatment the sponges are rendered perfectly white. Many sponges contain a more or less dark-colored, brownish core. If treated only with permanganate and acid, the core is either not bleached at all, or if it has been somewhat bleached, the tint is apt to grow again darker. By the above modification, every portion of the sponge is rendered white, and remains so.

An Emulsion of Castor Oil.—Julius Mulfinger contributes a note on emulsions to the *Pharmaceutische Centralhalle*. A physician in Brussels proposed to me the problem of preparing a cheap emulsion in very concentrated form for a patient suffering from skin disease. Five litres of oil were to be used in a full bath. Castor oil was selected as the cheapest easily-emulsifiable oil, and the experiments were limited to this oil. It was not so easy to find a suitable emulsifying agent. Experiments were made with gum arabic, tragacanth, albumen, marshmallow, linseed mucilage, soapwort, and decoctions of quillaya. Saponine and cholesterine were excluded, partially on account of the cost, and partially because some other experiments with them had failed. The emulsions with gum arabic and tragacanth held best, and after these marshmallow and quillaya, but the latter was brown. The emulsions with linseed and soapwort were also unsightly and less permanent. All had one disagreeable quality—that of decomposing in from three to six days, smelling sour and becoming useless.

The numerous favorable results that had previously been obtained with quillaya as an emulsifier led me to try it again. It did not seem advisable to use the tincture because alcohol decomposes emulsions, but in spite of this fact very good results were obtained by shaking the tincture with water. Five parts of tincture of quillaya (5 to 1) were mixed with ninety-five of castor oil and thoroughly shaken; without water it formed a complete emulsion having the appearance of condensed milk, and was easily miscible in all proportions with water. Even in warm weather it showed no indications of change at the end of six weeks.

This emulsion mixed with equal parts of syrup of orange flowers or almonds is an excellent form for administering this laxative, otherwise so difficult to take.

I would add that when ten per cent. of the quillaya tincture is mixed with tincture of benzoin, water can be added to the mixture in any proportion and yet the resin remain permanently suspended, which it is often difficult to do in any other manner.

Wines.—The British consul at Bordeaux, in his last report, states : "Low-priced genuine Bordeaux wines must be regarded as non-existing. If the well-known Bordeaux wines are advertized for sale at the same prices as used to be charged ten or fifteen years ago, or in times of exceptional abundance, such wines are not the growth of the vineyard under the name of which they are offered for sale. The prices of the commonest class of Médoc wines (*vin ordinaire*) have increased seventy-five to one hundred per cent. during the last

decade. To buy pure genuine Médoc, or other well-known wines of this district, a far higher price must be paid for them than has been obtained for some years. The quantity of adulterated and falsified (so called) 'Bordeaux wine' exported at present annually is very considerable."

Cod-Liver Oil.—The following hints on this subject, from Dr. Edward Ellis's authoritative work on "Diseases of Children," deserve to be noted by our professional friends.

The secret of giving cod-liver oil successfully is *not to give too much*, and to give it at the right time. Small quantities are best to begin with (a few drops for a very young child; ʒss.–ʒi. for older ones), in orange-wine, or a little weak nitro-muriatic acid in water, well sweetened. It should be given so as not to clash with meals, or soon after a meal: if before, it spoils the appetite. Bedtime is a good time, when it causes sickness; the child lying down immediately afterwards, it is usually well retained. When it causes diarrhœa, and often in rickets, I give it with equal parts of lime-water. A little iodide or phosphate of iron may be dissolved in it, or a little phosphorus, when the administration of that drug is desirable. As an external application to many obstinate forms of eczema capitis and other cutaneous diseases, I have found it extremely valuable. If necessary it may be made into an ointment, as:

℞. Ol. morrhuæ ..... ʒss.
Liquor. potassæ ..... ʒss.
Adipis ..... q.s.
Ft. unguentum (Dr. Néligan).

When cod-liver oil cannot be tolerated, glycerine and cocoanut oil are the best substitutes. They should be given in doses of ʒi.-ʒij. two or three times a day. I have tried the Dugong oil, but do not think that it possesses any special merit, nor yet the cod-liver oil emulsions, jellies, etc. I much prefer the plain oil. Some bear the light-brown kinds well, others prefer the pale. Burgundy or claret make good vehicles for cod-liver oil. Or it may be given sandwich fashion, in a little brandy and water at the bottom of the glass; then floating the oil, wetting the side of the glass with brandy and water, and finally pouring a little *rather* stronger over the top of the oil, will make it slip down tastelessly. Ice in the oil also renders it nearly tasteless. If the oil be thick from cold weather, it should be warmed and made clear before administration. As a rule, children get to *like* it without artificial means of any kind, I am therefore merely supplying hints for possible difficulties.

Salicylic Acid to avoid Variola.—The editor of the *Southern Clinic* certifies, along with Dr. Claridge and Dr. De Cailhol, to the abortive power of salicylic acid in variola, given in the ordinary doses. Dr. Bryce thus concludes: "I believe salicylic acid used early and freely will place small-pox in the category with measles, chicken-pox and other trifling complaints.—*Louisv. Med. News.* [More facts are needed.]

"The Newer Materia Medica." By Parke, Davis & Co., Detroit, Michigan, U.S.A., 1883.—This useful and compact little volume contains a great deal of valuable information concerning many remedies which are gradually taking a place in the list of medicinal agents. Convallaria majalis, Rhamnus purshiana, Piscidia erythrina, Myrtus Chekan, Yerba santa, and Berberis aquifolium names familiar enough to all; but there are few who would not be glad to obtain further information concerning their uses and properties. The work issued by Messrs. Parke, Davis & Co. is of very great value, and will be read with interest.

NOTE ON IODOFORM, BY PHILIP LEIDY, M.D.—From time to time recently there have appeared, in various medical journals at home and abroad, paragraphs recommending certain essential oils, such as the expensive oil of rose, geranium, etc., to be used for the purpose of concealing the persistent and disagreeable odor of iodoform. Considering the rank the latter has reached in therapeutics, such concealment is much desired. To add to the list I would recommend the oil of citronella as the most certain and satisfactory. Two drops of the oil to the drachm of iodoform will be found sufficient. It may be used for the same purpose with cod-liver oil when prescribed for external use. The oil itself is used as a rubefacient and anodyne externally, either alone or in combination. I am fully convinced of the advantages claimed for it. The price of the oil is a mere song, and as such is within the reach of all. The oil of chaulmoogra (very expensive), much lauded as an external application for sciatica, etc., I found much enhanced in its therapeutic value by combining with it the oil of citronella in the proportion of one-third of the latter. As it is comparatively little known to the profession in this country, I would recommend a trial, and am sure its use would become more general.—*Medical Times.*

FOREIGN HONORS TO AMERICAN PHARMACISTS.—Messrs. Parke, Davis & Co., of Detroit, have lately been the recipients of very distinguished honors abroad. They exhibited at the late International Pharmaceutical Exhibition, at Vienna, a line of the products of their laboratory, including preparations of the newer remedies with which their name has become so intimately associated, pills, gelatine products, etc. Their display was evidently a revelation to the Europeans, who affect to despise American pharmacy, and who were scarcely prepared for the display of artistic elegance and pharmaceutical excellence which characterizes the products of this house. The Emperor and Arch Duke Karl Ludwig took especial pains to compliment Mr. Wetzel, the representative of the house, on the beauty of the display, which also won from the jury of award of the Exhibition a gold medal.

PURGATIVE COFFEE.—The following decoction is recommended in *Progrès Médical* as an agreeable purge:

Senna	℥	v.
Roasted coffee		ijss.
Boiling water		iij.
Milk		jv.
Sugar		i.

To be taken in a single dose by an adult.

We may remark for the benefit of readers that the same end is secured by simply mixing the proper dose of infusion or extract of senna with an ordinary cup of coffee. The taste of the drug is completely disguised, and its action is promoted by the coffee.

PRESERVATION OF URINE FOR MICROSCOPICAL EXAMINATION.—According to Dr. Curtis, the addition of about grs. iv. of chloral hydrate to oz. iij. of urine will preserve it for a month, if kept at ordinary temperature.—*L'Independente.*

COCA-PLUG.—A combination of coca and tobacco is being quite extensively advertised in the St. Louis papers. Certificates from six prominent St. Louis physicians to the effect that tobacco and coca would be less injurious to the system than tobacco alone form a part of the advertisement.—*Medical World.*

[To use the coca alone would be still less injurious, and not to use either is best of all.—ED.]

Sodium Hyposulphite.—Dr. W. E. Buck writes in the *British Medical Journal* on the inefficiency of disinfectants in allaying the fetor of cancerous ulcers. After failure with a number of disinfectants, he tried a saturated solution of hyposulphite of sodium added to an equal quantity of water, and found it exceedingly efficacious. This disinfectant is cleanly, has no smell, does not stain and is cheap.

Good Strong Vinegar.—Dr. Squibb recommends a mixture of diluted acetic acid two hundred and fifty-six parts, alcohol one part, or about one-half fluid ounce to the gallon. (*N. C. Med. Jour.*) If the mixture be set aside for a few weeks—the longer the better—enough acetic ether is generated to give it the full, clean aroma of fine vinegar; and then for table use it is very far superior to vinegar made in the ordinary way by fermenting cider, and it is more wholesome, because free from decomposition, products of the fermentation of rotten or bad fruit, and free from animalculæ and other impurities always present in vinegar by fermentation.

Carbon Monoxide and Pregnancy.—A debated point in animal physiology is the question whether carbon monoxide can pass from the maternal to the fœtal circulation. The influence of the subject outside the sphere of pure physiology is small but important. Accidentally or suicidally, a pregnant woman may have succumbed from the respiration of fumes from burning charcoal. Can the life of a viable fœtus be saved by the timely aid of a Cæsarean operation? From his investigations on rabbits, Mr. Hogyes has answered this question in the affirmative, since he was unable to detect the gas in the fœtal circulation by means of the spectroscope. MM. Gréhant and Quinquaud, however, conclude (see *La France Médicale*, No. 16) that, in small quantities, carbon monoxide may pass over from the maternal to the fœtal blood.

Inodorous Iodoform.—The peculiar odor of iodoform is found to be well masked by the addition of attar of rose, one minim to the drachm, or of essence of rose geranium, three or four minims to the drachm. The clinic room gets to smell like a florist's shop.—*Polyclinic.*

Incombustible Paper.—M. G. Meyers, of Paris, is stated to have invented an incombustible paper, which in addition to its power of resistance to extreme heat has the merit of preserving its normal appearance under the action of fire. The utility of such a material is obvious. Amongst other purposes to which it may advantageously be applied is the construction of non-inflammable theatrical scenery, the combustible nature of which, as at present in use, has contributed so largely to disasters from fire in places of scenic entertainment.

Fruit Jellies made without Fruit.—M. Girard, director of the Paris Municipal Chemical Laboratory, says that the chemical knowledge applied to the concoction of spurious foods and drinks is of a very high order, and would suffice to make the fortunes of the adulterators a dozen times over, if applied in an honest capacity. The matter which seems to have aroused him of late is a peculiarly ingenious thing in gooseberry jelly. It appears that the article is made entirely of seaweed. The coloring matter is fuchsine, and the flavor is given by a compound of acetic ether, tartaric acid, aldehyde, and œnanthic. Inspectors often recognize it from the fact that it is "a little more elegant than the genuine article." M. Girard ought to send over to a New York grocery if he wants first-class jellies of all kinds made without the real fruit.

LECTURES.

New Method of Opening Psoas Abscesses.

Lecture delivered at the General Hospital, Birmingham. By T. F. Chavasse, M.D. Edin., F.R.C.S. Eng., Surgeon to the Hospital.

Gentlemen: The proper method of treating psoas abscesses, depending upon caries of the spinal column, with expectations of relieving the patient and of obtaining a successful issue, is a question on which there is not a unanimous agreement of opinion amongst surgeons at the present time. Some still consider it best to advocate an expectant policy, and, when driven to active measures, believe that frequent aspirations or small valvular openings made as far as possible from the primary seat of the disease, and closed immediately after the escape of the pus, are the measures likely to be most serviceable in these cases. Such shrink from a free incision into the abscess cavity, owing to the practical fact that severe constitutional symptoms will follow the proceeding if undertaken without special precautions. But the teaching of Sir Joseph Lister, and the introduction of antiseptics into our daily practice, have proved that many operations can now be undertaken with safety and success by those who have had adequate training and experience, which a few years ago would have been deemed rash and unwarrantable. With this knowledge, I would urge that a spinal abscess should be regarded in the same light as a collection of pus due to osseous disease in any other region of the body, and that a free incision should be made and efficient drainage established as soon as the diagnosis is complete. The relief to pain which this evacuation affords is very marked, and will frequently at once restore appetite and healthy sleep—matters of much moment to those affected with a condition which, under the most favorable circumstances, runs a course extending over several months. The best position for making the necessary incision and draining orifice in cases of psoas abscess I propose to consider with you to-day.

The patient before you is twenty-eight years of age, and has a very marked angular curvature involving five of the lower dorsal vertebræ. His history is that he was admitted into the hospital on March 10, 1883, and that for eighteen months before he had experienced darting pains in the lumbar region of the spine, causing intense suffering, which was aggravated by movement or by lying on the back. In September, 1882, pain was felt in the right groin, and movements of the thigh were accomplished with difficulty. Shortly afterwards, a lump was noticed in this situation, and continued slowly to increase. On admission, this swelling was found to be a collection of pus in the sheath of the psoas muscle.

On March 20 the abscess was opened in the following manner: An incision was made immediately above the crest of the ilium, commencing at the edge of the erector spinæ muscle and carried transversely outwards for four inches towards the anterior superior spine Having divided its various structures as in colotomy, the anterior edge of the quadratus lumborum muscle was reached. The forefinger was then passed downwards and forwards on the iliacus until the tense and distended psoas sheath was detected. A scalpel introduced by the side of the finger incised the abscess sac, and the opening was subsequently enlarged by the introduction of a pair of dressing forceps. This proceeding gave exit to a pint and a half of pus. Still keeping the forefinger in the wound, two

large drainage tubes were introduced into the abscess cavity and left there.

The patient progressed favorably; in a month the drainage tubes were no longer necessary, as the matter escaped freely without artificial aid. By July 10 the discharge was so much reduced that a poroplastic jacket was fitted on over the antiseptic dressings. A fortnight later he was allowed to get up. In August the wound was quite healed, and the patient returned home. He now gains a livelihood for himself and family, to use his own phraseology, "by doing odd jobs."

Another case in which the same plan of treatment was adopted was that of W. E. K——, aged thirty-five, who had a history of back pains of four years' duration, and a distinct angular curvature of one year's existence. Date of admission, January 22, 1883. At that time the patient was pale and emaciated, with an exceedingly large antero-posterior curve, involving ten vertebræ, and a psoas abscess pointing below Poupart's ligament. The pain in the back was so great that the man, a chemist by trade, was accustomed to take subcutaneously eight grains of morphia daily. This was reduced gradually to two grains and a half. On February 14 the abscess was opened from behind, and two pints of pus, together with much thick caseous material, were evacuated. The relief to pain by letting out this pent-up matter was very great. For some days the discharge was excessive, but by the beginning of March it had so materially diminished that on the 9th of that month the drainage tubes were withdrawn. In May it was necessary only to dress the wound once in five days or a week. In June he left the hospital at his own request, the sinus being unhealed, and his urine containing much albumen.

Mr. F. A. Hallsworth, of Atherstone, who attended the case subsequently, has kindly informed me that death took place on September 30th; that a sinus always remained, through which, without any trouble, the drainage was effected. Amyloid degeneration of various viscera hastened the end.

You will naturally ask, Why open psoas abscesses pointing in the thigh above the iliac crest? The following are the advantages claimed for the procedure I have practised in these two cases:

1. The abscess is tapped, and the pus escapes at the most dependent point it is possible to obtain, and, as the patient lies on his back, the cavity drains itself without trouble or difficulty.

2. When a sinus is thoroughly established, the drainage tubes may be omitted at an early date, and any accumulation is unlikely to take place.

3. The drain hole is very near the diseased bone, so that the three or four inches of abscess cavity below this point becomes obliterated almost immediately after the operation. Hence a diminution of secreting surface.

4. The pus escapes from an orifice removed from the genital organs, and the chance of the wound becoming septic is lessened.

5. The antiseptic dressings can be applied and retained in position more readily than if the drain opening is in the thigh. Moreover, the pus will not so easily reach the edge of the dressing, and consequently it will not be necessary to make changes so frequently.

6. From its situation the patient is less likely to interfere with the dressing than if it be applied anteriorly.

The disadvantages of making the incision in the position indicated are that the operation is slightly more difficult, some muscular fibres are severed, and there will be a little more bleeding than if the abscess

be opened where it points on the inner side of the thigh; but all of these objections are trifling as compared with the satisfactory drainage. Even if the pus has burrowed beyond the thigh, and has reached the knee or a lower point in the extremity, the incision should still, in the first instance, be made in the back, and the abscess tapped there. Subsequently an opening may also be made where the pus is pointing to allow the escape of the fluid accumulated below the principal draining orifice; this secondary incision will soon heal. The next best position to open a psoas abscess for antiseptic purposes is above Poupart's ligament, by means of an incision, as though about to ligature the external iliac artery. Having reached the transversalis fascia, by pressure below the pus can be made to bulge, or, failing this being accomplished satisfactorily, an opening large enough to admit a probe may be made in the thigh where the abscess is presenting, which when passed up under Poupart's ligament will indicate the whereabouts for the free incision in the deep textures. After the tubes have been inserted the orifice in the thigh closes. The drainage of the abscess in this position is not so good as by the other method; the opening not being so dependent, the tubes must be retained for a longer time, and more difficulty is experienced in getting a free escape of the pus. In one instance in which I operated by this plan upon a woman with a psoas abscess, the result of the disease of the sacro-iliac synchondrosis, the fingers of the patient would wander under the dressings in spite of all protestations and threats, and the result was a septic condition of the wound, and eventually death. It was this case that made me recall the method of posterior incision, which, I believe, Mr. Chiene, of Edinburgh, was the first to advocate.

On October 24th, the University of Edinburgh completed the three hundredth year of its existence. The Medical School dates from a hundred years later.

Music and Physic. There can be no question about the influence of music upon the processes of thought and emotion; and disease, we know is very largely a matter of thinking and feeling. Why, then, should not disease be checked and controlled by the application of a concord of given sounds as well as by the swallowing of a prescribed course of pills or powders? In many cases, perhaps, what we call disease is only a longing for harmony and melody, a reaching out after something pleasant to listen to. It may be, if we but knew it, that often when we think we require calomel, quinine, or podophyllin, we really need to have "The Arkansaw Traveler" executed for us on a violin, or "Peek-a-Boo" warbled for us in a voice adapted to the emergency. Herbert Spencer has analyzed this mysterious connection between music and the scheme of feeling in a very profound and skilful manner. He does not go quite to the extent of recommending music in place of ordinary medicine, but his theory tends toward such a result. Every mental excitement or emotion, he declares, is accompanied by a corresponding muscular action, and the finer and loftier feelings find expression through the muscles that are exercised in the production of music. The philosophy of treating neuralgia with a tuning-fork obviously rests upon the same principle which Mr. Spencer here announces, and we have but to pursue it to its legitimate conclusion, and it is bound to justify the doctrine that in music lies the true secret of dealing with sickness.—*St. Louis Globe-Democrat.*

REVIEWS.

THE MECHANISM OF SPEECH. THE ORGANS OF SPEECH AND THEIR APPLICATION IN THE FORMATION OF ARTICULATE SOUNDS. By GEORG HERMANN VON MEYER, University of Zurich. New York: D. Appleton & Co. 1884.

There are books that give in general terms the anatomy of the mouth and throat, in order to explain the mechanism of speech, but none that enter so fully and minutely into the matter, regarded from the point of view of the student of philology. Prof. von Meyer proceeds in the order of science, and examines in natural sequence the appearance and function of the organs of speech, and, after a careful understanding of these, takes up the relation between the organs of speech and the formation of sound, devoting the third and last part of the treatise to articulation proper. Probably the newest portion will be, for ordinary laymen, the pages on unusual forms of the respiratory mechanism, such as hiccough, gaping, and stammering.

"Hiccough arises from over-irritation of the nerves of the diaphragm, the cause of which we know to be either psychical conditions or overfilling of the stomach. The influence of the latter is undoubtedly due to the fact that the overladen stomach resists to a greater or less extent the fall of the diaphragm; the contractions of the diaphragm become, therefore, necessarily more labored and occasionally, like other over-irritated muscles, assume a convulsive character. Frequently, however, the hiccough appears as a sign of the general over-irritation of the nervous system in hysteria, and probably from the same person it may not uncommonly be observed in otherwise healthy young persons, particularly children. The above explanation of hiccough as a convulsive contraction of the diaphragm is further confirmed by the manner in which it may be stopped. It is only necessary to allow an exceedingly protracted and finally forcible expiration to follow a long and quiet inspiration. Gaping also arises from a convulsive form of inspiration, which, however, is not so short and violent as the hiccough. The whole phenomenon seems an indication of strong desire for air, and the existence of this desire under these circumstances in which gaping is generally observed—sleepiness, for instance, or weariness—may be perfectly explained as follows: Such circumstances are accompanied by a general inactivity of the nervous system, which shows itself in a weak respiratory action, insufficient for the body when awake, so that after a time a more or less marked desire for air must arise, the demand for which is announced by gaping. The root of that defect in speaking which we call stammering lies also in spasmodic inspiration, and so resembles the hiccough that here, as in the latter, the diaphragm is subject to spasmodic contraction. The defect in speech is, however, a phenomenon which only at times accompanies the spasm of the diaphragm, being due to an attempt to speak during the spasm. There may be no attempt to speak; in this case it will not cause stammering, but will be quite imperceptible to the observer. Great physical excitement will occasion attacks of stammering. If, now, stammering is only an occasionally observed symptom of a long contractile spasm in the diaphragm, it must be clear that all attempts to cure stammering by exercising the organs of the mouth and throat must be unsuccessful."

This long quotation shows the excellences as well as the limitations of Prof. von Meyer's able treatise. It is well to point out how much deeper seated than most people imagine are the defects so very common in articulation. At the same time there can be little doubt that great help can be obtained by working from the outer organs to the inner, or rather to the nervous system, for such procedures are very apt to soothe the nerves. Moreover, in many cases the radical defect is somewhere in the organs of speech, and neglect has had its

inevitable bad effects on the nerves governing the diaphragm. It is like brain and stomach; does the headache come from one or the other? To singers, actors, and elocutionists; lawyers, clergymen, and whoever needs to exert the voice, the last part will he most useful if due attention is given it.

CONFEDERATE WAR PAPERS. By GUSTAVUS W. SMITH, late Major-General Confederate States Army. New York: Atlantic Publishing and Engraving Company. 1884. From the author.

It is, of course, unusual to review works of general literary interest, in a medical journal, and when the work is war-like in character and origin, all peaceable old editors should refrain from indulging in such martial, if very interesting, labor. In the present case, however, though the time has long since past for so peaceable an editor even to fight over old battles again, there must be an exception to the rule, for the author of this most valuable work is one with whom the editor of this JOURNAL served as his Medical Director during a great portion of "the late war." Apart from this excellent reason for making an exception to a very useful rule, it must be claimed that physicians cannot always be regarded as devoted solely to the pestle and mortar, the lancet and bistoury, or the pills and plasters of the profession, but that "they are very men," and take not only an interest, but an earnest interest, in questions affecting their fellow men, and in all forces manifesting grand results in the historical revelations of their day and generation. For these reasons and others this review is presented.

Gen. Smith has for forty years been greatly admired by the military men of this country. He graduated at twenty-one at West Point, was appointed Lieutenant in the United States Corps of Engineers, and in two years afterwards was Assistant Professor of Civil and Military Engineering and the Art of War at this famous military academy.

He left soon after to serve with great distinction in the Mexican War, and was oftener breveted than any officer in the army. Indeed, the Secretary of War and President struck off one of his brevets," on the ground that no second lieutenant could by law hold three brevets at once." He was complimented in orders by Generals Scott, Harvey, Twiggs, and other distinguished officers, with whom he served; and being with General Scott, throughout nearly all of his Mexican battles, entered with him the City of Mexico. At the close of this war he was (covered with laurels and honors) sent back to West Point as professor of the Art of War.

After some years he resigned his commission, and served with distinction in various positions of civic relation and character.

At the commencement of the Confederate struggle, and before the secession of his native State, Kentucky, he reported at Richmond, Va., and was at once made commander of one-half of the Army of Virginia. He afterwards commanded the old First Division; then the department of Aquia; and again one-half of the army around Richmond, Va. At the battle of "Seven Pines" (where his Medical Director lost his right arm) General Smith commanded with great efficiency. He was on that day placed in command of the entire army, being relieved some days after by General R. E. Lee, who led that classic and immortal command until "the flag was furled at Appomattox."

General Smith being invalided (June, 1862,) was allowed a 60 days' respite, and, reporting for duty, was placed in command of Richmond and its defences, and over all of the country extending from Cape Fear River in North Carolina, to the Rapidan in Virginia. In this great belt were quartered over 40,000 sick and wounded (27,000 in Richmond), and to this number were added over 20,000 men on active duty, making a command of over 60,000 soldiers and enlisted men; the largest command in the Confederate service.

From causes carefully narrated in this book, he resigned his commission in 1863, and served with great gallantry, as commander of the forces of Georgia, until the close of the war.

Such is very briefly his record, as given in this volume. He is now in New York City.

The book is one of great value. In it there is to be found, for the first time, a record of the causes which led to the fall of New Orleans. As official letters and papers are given, this account is one of great interest and importance.

There are also presented, for the first time in history, the true reasons which prevented the Confederate Army, after "the first Manassas," from capturing the city of Washington, which, as all know, could easily have been done. In addition, very valuable information is given in regard to matters in and around Richmond and Virginia ; and as in 1862 General Smith was appointed by Mr. Davis, Secretary of War *ad interim*, his sources of information, throughout his narrative, could not have been better. He gives the only correct history of the battle of "Seven Pines," so far published, with a most valuable map of Richmond and its defences, and a war map of the positions of the contending forces at the battle of the Seven Pines.

Most of this work is made up of indisputable facts never before given to the Public, and sets forth the truth, in correction of the very many errors which have soiled and injured publications of kindred object and purpose.

The price of this volume, which contains also a steel plate engraving of the author, is $2.00; which sum can be sent to the author, at 12 Perry street, New York. The book is well issued.

MANUAL OF GENERAL MEDICINAL TECHNOLOGY, INCLUDING PRESCRIPTION WRITING. By EDWARD CURTIS, A.M., M.D., Professor of Materia Medica and Therapeutics, College of Physicians and Surgeons, Medical Department of Columbia College, in the City of New York. New York: William Wood & Co. 1883.

The author of this work is well known as a careful and efficient teacher. His book is written in the "lecture style," and is, most likely, presented as it was delivered to his class.

In a theoretical view of the matter, it is adapted for the use of medical students, but in reality it will be useful to many practitioners ; for a very large number of physicians seem to be ignorant of the rules which should govern the writers of prescriptions. Bad spelling ; the intermingling of the nominative and genitive cases; the use, alternately, of the technical and English names of the elements of the prescription ; and "dog Latin" used in the directions are very common blunders. Even in text-books such errors appear. Those who feel that they cannot write a prescription correctly should buy this book, and study it: when none of their clients are near!! It is a very good book and has its uses.

ELEMENTS OF HISTOLOGY. By E. KLEIN, M.D., F.R.S., Joint Lecturer on General Anatomy and Physiology in the Medical school of St. Bartholomew's Hospital, London. Illustrated with One Hundred and Eighty-one Engravings. Philadelphia: Henry C. Lea's Son & Co., 1883. 12mo. pp. xii–352, (Students' Series of Manuals.)

This book is a *multum in parvo*. It is seldom indeed that one finds so much of great value in so small a space. It is a faithful mirror of modern histology, and is carefully worked up to date. The most recent researches and demonstrations are faithfully embodied in the volume. The wood-cuts are accurate and of a superior order, and the references copious and useful. It may safely be

said that there is no work now before the profession in which the reader can learn so comprehensively, so accurately, and with so small an expenditure of time, the great, indeed the chief, facts of modern histology.

SEPULTURE: ITS HISTORY, METHODS, AND SANITARY REQUIREMENTS. By STEPHEN WICKES, A.M., M.D. Large 8vo. pp. 156. Philadelphia: P. Blakiston, Son & Co. 1884.

This book is a plea for sepulture. In the present "craze" in regard to cremation its publication is timely, and will accomplish, it is hoped, good results. Very few careful thinkers really believe that there is any real need for cremation. All admit that there are abuses in sepulture; as when there is a great crowding together of the dead; when the burial is superficial and insufficient; when the same ground is used more than once; where graves are uncared for; and when caving in of the earth is unremedied, etc., but that sepulture in rural cemeteries is a source of danger, or that cremation is needed, very few are prepared to admit. Of course there are some soils, as at New Orleans, where burial is almost impossible, and where cremation is really necessary; but, as a rule, sepulture in rural grounds is perfectly safe.

THE PATHOLOGY AND TREATMENT OF VENEREAL DISEASES. By FREEMAN J. BUMSTEAD, M.D., LL.D., and ROBERT W. TAYLOR, A.M., M.D. Fifth edition, revised and rewritten, with many additions, by DR. TAYLOR. 8vo. pp. 906. Philadelphia: Henry C. Lea's Son & Co. 1883.

This work has always been one of the ornaments of the library, as well as one of the best guides in practice. It is one of the very few American medical classics. Its accomplished author gave not only all that was necessary for the guidance and information of the practitioner, but had made his work a museum, so to speak, in which were carefully preserved very much of the curiosities and earlier records of his department. He had prepared, as is well known, but little of the last edition of his book, his illness being such as to prevent such labor, and his co-ordinate really prepared that edition for the press. Dr. Taylor has added some seventy pages to the book, and has made it to correspond more thoroughly with the best modern works. As it appears to-day, it is a most valuable and useful volume. The chromo-lithographs, cuts, paper and binding are unusually excellent.

WHAT TO DO IN EMERGENCIES. A Manual Explaining the Treatment of Surgical and other Injuries in the Absence of a Physician. By CHARLES W. DULLES, M.D. Second edition. Philadelphia: P. Blakiston, Son & Co. 1883. Cloth, pp. 119.

The title page of this work is a very fair indication of its object and scope. It has been the fashion, since Esmarch originated this drilling of unprofessional people to do professional work, to go into hysterical adulations over the matter; and many doctors, some with good motives and some with bad, have gone before the secular Public in connection with it. They have been advertised in the great daily papers; have organised, with the aid of politicians and lean and lank old maids, first-aid societies; have "lectured" to factory and railroad hands, cigar makers, the police, etc., teaching them where the great arteries run, what the bones are called, etc. And yet common sense ought to teach physicians at least that the whole movement is a delusion and a snare. What to do in emergencies is easily told: keep the patient quiet and get a good doctor as soon as possible. The book is a very fair one.

AN ETHICAL SYMPOSIUM. Being a series of Papers concerning Medical Ethics and Etiquette from the Liberal Standpoint. By Different Authors, with an Appendix. New York: G. P. Putnam's Sons. 1883. Cloth, pp. 210. Price $1.25.

In this work are gathered together a series of papers by very excellent members of the profession, who wish to show nine-tenths of the Medical Body that one-tenth of it is right on the subject of ethics and nine-tenths of it are wrong. Their views are presented with care and moderation, and it is only to be regretted that so much careful writing is entirely thrown away.

"Sev'ral wise men of Gotham
Went to sea in a bowl;
If the bowl had been stronger
My song had been longer."

BY JOSEPH COATS, M.D., Pathologist to the Western Infirmary, and the Sick Children's Hospital, Glasgow; Lecturer on Pathology in the Western Infirmary; Examiner in Pathology in the University of Glasgow, President Pathological and Clinical Society, Glasgow, etc. With 339 illustrations. Philadelphia: H. C. Lea's Son & Co. Cloth, $5.50; sheep, $6.50.

This is one of the really excellent works which the publisher has contributed to the medical library. It is carefully and correctly written, and is definite and specific in regard to the views expressed. Of course there is no claim to originality in the volume; pathology is common property, and any real discoveries in its domain are thoroughly made known by medical journals long before they can reach the Public through formal text-books.

Perhaps the only tendency to originality is to be found in the author's efforts to give the macroscopic and the microscopic descriptions in connection with each other; a very useful device. The portions of the work devoted to a discussion of the subject of bacteria are quite full and elaborate. He leans to the popular views of the day as to multiform and specific bacilli.

The book is beautifully issued and profusely illustrated. One may well predict that it will be an authority with experts.

THE DISSECTOR'S MANUAL. By G. W. BRUCE-CLARKE, F.R.C.S., and CHARLES BARRETT LOCKWOOD, F.R.C.S. Philadelphia: Henry C. Lea's Son & Co. 1883.

This is a fair book; no more. The plan of the author is to divide the body into regions, and to explain to the student how these regions are to be dissected out and the parts contained fairly exposed. The plan and the method of its execution are very fair. The cuts are fairly good, though the presentations of the front and back of "the subject" are very poor.

A PRACTICAL TREATISE ON IMPOTENCE, STERILITY, AND ALLIED DISORDERS OF THE MALE SEXUAL ORGANS. By SAMUEL D. GROSS, A.M., M.D. Second edition. Thoroughly revised. With 16 illustrations. 8vo. pp. 174. Henry C. Lea's Son & Co. 1883.

This is the best work on these subjects now before the profession. It is a work which will be a positive addition to any physician's library.

MISCELLANEOUS.

PREHISTORIC TREPHINING.—Mr. T. F. I. Blaker, M.R.C.S., writes as follows to the *Lancet*: "That many operations in surgery were practised in remote times is undoubted, but I think few surgeons realize how very ancient indeed is the operation of trephining, or, as it was formerly called, trepanning, the skull. During recent years some curious discoveries have been made in France and elsewhere conclusively proving that trephining was practised by neolithic man, and, further, that the operation was ofttimes successful. These later stone-age men must have inhabited Europe several thousand years ago, and were, of course, excessively barbarous, ignorant, and superstitious. Indeed, it was their very superstition which led them to trephine the skull—so Professor Broca informs us, and he has given the subject his greatest attention. Trephined human skulls have been found by Dr. Prunières of Toulouse in the cave of Homme Mort in in the Department of Lozère, in the caves of La Marne and of Lourdes, near Pau, in the Canary Isles, in Algeria, in Mexico, and in Peru. The operators had, of course, no better instruments than more or less perfectly sharpened flints, and with such rude tools they performed their operation. First a **V** or **T** incision was made down to the bone, the flaps were retracted by assistants, and the bone was then persistently scraped until at length an opening was made sufficiently large to expose the brain and its membranes. This opening was a *viaticum* or way of escape for the demons who had taken possession of the body and were causing the epilepsy or insanity, for such were the 'cases' which were operated on.

"Now, considering the class of case, the desperate nature of the operation, and the barbarous method of performing it, to say nothing of the after-consequences—*e. g.*, hæmorrhage, blood poisoning, erysipelas, the danger of injury to the brain, the want of proper nursing, and bad hygienic surroundings generally—it is wonderful that any one patient should have recovered; and yet, incredible though it seems to be, Dr. Prunières states that out of twenty skulls in his possession (all of which were trephined during life) nineteen of them exhibit indubitable signs of having recovered from the operation. This is shown by the fact of the edge of the bone having become smooth in consequence of the cells of the diploë having become covered by the newly-formed bony tissue.

"The discs of bone which were separated from the skull during the operation were looked upon as talismans possessing vast therapeutical power, and capable of counteracting witchcraft, and of preserving the possessor of them from disease. These talismans were therefore worn round the neck as amulets, and were considered as of priceless value.

"After the death of a patient who had survived the operation, it was considered 'only fair' to give the original possessor of the piece of bone so highly prized his own back to him once more. Professor Broca tells us that this was done in order that the deceased might carry with him into the next world this talisman, and so be preserved from the torments of the evil spirits which had haunted him on earth. This, says Professor Broca, is the earliest indication we have of a belief in a life beyond the grave. There is a touch of humanity to be discerned both in the operation itself and also in the restoration after death of the precious amulet to its rightful owner. This is the more remarkable when we consider what 'untutored savages,' if not cannibals, these neolithic men were."

LORD SANDWICH once asked Foote whether he expected "to die from disease or the gallows?" "That depends," said Foote, "on whether I first embrace your lordship's mistress or your principles."

Influence of Diphtheria upon Pregnancy.—In a communication addressed to the Academy of Medicine of Paris (*Archives Générales de Médecine*, October, 1883), Dr. Ollivier concludes that diphtheria may acquire an additional gravity when occurring in pregnant women, because of the liability it has to cause abortion. This accident is due, in the larger number of cases, not to asphyxia nor to an elevation of the temperature of the blood, but to some alteration in this fluid, an alteration which, if it is undefined, is nevertheless incontestable. The possibility of abortion, with its dangers, calls for increased precautionary measures and more strict isolation in the case of pregnant women in the same house or in the same hospital ward with patients suffering from diphtheria.

An Ever-ready Splint.—Much pain is oftentimes caused to the unfortunate possessor of a broken leg, by the handling necessary in removing him from the place of accident to a hospital or his home, and particularly is this so, if we do not happen to have handy a splint with which to steady the fragments. In the *Polyclinic*, Dr. R. J. Levis suggests a very sensible and efficient procedure, when he says "the uninjured limb can be made to temporarily act as a splint, and take care of the injured one, by simply bandaging the limbs together.

The Contagion of Tuberculosis.—The following are the conclusions arrived at by M. Daremberg, in a communication addressed to the Academy of Medicine of Paris (*Bulletin de l'Académie*, October 7, 1883): 1. Tuberculosis is a disease of parasitic nature, transmissible by inoculation, alimentation or inhalation. 2. It is always caused by the absorption of a germ from without. 3. When occurring by inhalation the quantity of the contagion is of little moment. It can operate only in a suitable soil. In a word, contagion is an influence to which all are exposed, but which is operative only in those individuals in whom hereditary or acquired vices of nutrition have prepared a field suited to the growth and reproduction of the germ. 4. Local and general tuberculoses differ only in degree. 5. Scrofula appears to be a diathesis, while tuberculosis is an infection engrafted upon diatheses. 6. The infectious germs of tuberculosis are not usually inherited, but rather the vices of nutrition which have provoked the disease in the ancestors. 7. Therapy, while permitted to seek for specifics, ought, in the way of prophylaxis, to aim at the destruction, through general hygiene, of the causes which prepare a fit soil for the reception of the tuberculous contagion. After the disease is established it should seek to combat the phenomena arising in the economy from the presence and proliferation of the infectious agent.

A Substitute for Transfusion of Blood.—William T. Bull, M.D., Surgeon of the Chambers street and New York Hospitals, says the use of saline injections in Asiatic cholera in the early part of this century demonstrated the safety of such a procedure, and likewise its inefficiency in checking the career of that disease. Within a few years, however, this method has risen to the level of a life-saving measure, as a substitute for the transfusion of blood in conditions of acute anæmia and collapse. Of nineteen patients who have been subjected to the operation, when at the point of death, thirteen have entirely recovered; in three death was averted, but occurred later; and in the remainder only a temporary improvement was effected.

I have employed the solution as used by Szumann and also recommended by Schwarz, consisting of water, ℥xxxij.; common salt, ℥jss.; carbonate of soda, grs. xv., and in place of the irrigator a tubulated bottle with rubber tubing and canula attached, and have had distilled water at my disposal in but one case, when a two per cent. salt solution was injected. The average duration of the injection has been fifteen minutes.

The Treatment of the Placenta after Delivery.—Dr. W. P. Giddings, of Gardiner, Me., writes: "Noticing in your valuable journal of December 29th an article from the *Deutsche Med. Wochenschrift*, by Dr. Dohrn, on leaving the placenta for nature to remove, I am induced by it to add my strong endorsement of this method. In quite an extensive obstetric experience, I have adopted three several methods for the delivery of the placenta, viz.: following for the two first years of my professional life the one taught me by the late Prof. Buckingham, of Harvard, instruction to deliver at once, by compression and gentle traction upon the cord; second, Credé's; and last—and to my mind the best—leaving it to the natural efforts of the uterus. I always follow with my left hand the contracting womb as the child is expelled, to insure the safe contraction, then entrust it to the nurse or some competent person while I tie and separate the cord. Having disposed of the child, I again place my hand upon the uterus, to make sure it does not unduly relax, and await its efforts after a natural period of rest. During six years I have followed this plan with not a single accident, or a delay of more than twenty minutes, with a single exception, and that was thrown off at the expiration of fifty minutes with no other inconvenience than weary waiting. Contrary, however, to Dr. Dohrn's experience, I think a little more blood is lost then when Credé's method is adopted, but I have come to look upon that as a more natural and conservative principle, inasmuch as my patients have made more rapid recoveries than when the case was hurried. I will add that, after delivery of the placenta, I always hold the uterus down until permanent contraction is secured.

What Constitutes Alcoholic Excess?—This very important practical question having been up for discussion before the Philadelphia County Medical Society, Dr. Henry Leffman, struck by the diversity of views expressed thereon, has contributed an article on the subject to the *Polyclinic*, basing his assertions on recognized authorities. Alcohol is taken in excess when any portion of it escapes unchanged with the excreta. The capability of consuming alcohol must, of course, be somewhat dependent upon the nature of the individual, but the rule as given by Parkes will be found to be practically reliable. He fixes the limit at one and one-half ounces of absolute alcohol in the 24 hours. When given in excess of this some will appear unchanged in the urine, and the system will exhibit signs of alcoholic narcosis. To convert this amount into approximate equivalents of the given beverages is easy. Brandy, whiskey, rum and gin contain about one-half their volume of alcohol. Wine varies from one-tenth to one-fifth, and some samples are below and some above these limits. Beer contains about one-twentieth.—*Therapeutic Gazette.*

The Anatomy of Hæmorrhoids.—At a recent meeting of the Pathological Society of London (*British Medical Journal*) Mr. Roeckel said that there were two views with regard to the structure of hæmorrhoids; according to the one they were varices, according to the other they were vascular growths (angiomata). He had examined about thirty specimens; as a rule a pile consisted of a layer of mucous membrane inclosing some submucous tissue in which lay enlarged veins with thickened walls; in one specimen only did arteries contribute in any sensible degree to the bulk of the pile, and in one case also the pile contained some muscular tissue. The epithelium on a pile ceased, at a certain point, to be columnar, and became squamous; the transition was not gradual, but quite sudden.

Beef Tea.—There is in a bowl of beef tea but little, if any, more nutriment than there is in a glass of lemonade. The fact is well known to every profes-

sional reader, that albumen coagulates at a much lower temperature than that of boiling water used in the preparation of beef tea. Through this coagulation the albumen, or essentially nutritive portion of the meat, becomes entangled in the meshes and firmly held there, little or none of it finding its way into the decoction. The beef tea is, at best, a palatable stimulant.

A scientific gentleman made an experiment, which he undertook with a view to determining the relative nutritive value of Liebig's extract of beef. Three dogs were taken and shut up in separate pens side by side. The first dog was ordered a diet of Liebig's extract of beef and all the water he wanted to drink. Dog number two was restricted to water, being allowed nothing whatever to eat, while the third animal was allowed neither food of any kind to eat, nor water. Of course the dog that had no water was the first to die, but, surprising as it may appear, the dog which was furnished with water only outlived that which was fed on the meat extract, the latter dying with a quantity of the extract within six inches of his nose.—*Therapeutic Gazette.*

Does Sunshine Affect Combustion.—It is evident, from the correspondence of the *Science News*, that a considerable number of persons believe that when direct sunlight falls upon flames combustion is less active, and will ultimately be arrested by it. This view is, however, erroneous, as has been proved by carefully-conducted experiments. A candle arranged so as to burn at a uniform rate, and affixed to delicate balances, shows no change in the rate of consumption of wax when burned in the full blaze of the sun or in the shade. Precisely the same number of grains of the solid material are changed in and out of sunlight in a given time. When we kindle a wood or coal fire upon the hearth, it appears to the eye that the flame is less intense if sunlight comes in through the uncurtained window, and rests upon the ignited fuel; but this appearance is delusive. We need shade to observe clearly the process of combustion, especially when the flame is largely composed of burning hydrogen or carbonic oxide. A pure hydrogen flame is invisible in sunlight, and even light carburetted gases are indistinctly seen by daylight. No one need fear that sunshine will put out fire.

Local Anæsthetics.—The following formulæ may be found serviceable as local anæsthetics for small operations:

℞. Chloral hydrat., gum camphor.....aa ʒij.
Morphiæ sulph..... ʒss.
Chloroform..... ʒj.

M. This may be painted with a camel's hair brush over the area to be incised; allowed to dry, and repeated as as often as necessary to render the part insensible. Prof. Rudier proposes the following:

℞. Etheris aut chloroform..... ʒij.
Camphor..... ʒi.

M. Apply with a brush.

℞. Acidi acetici (cryst.) one part.
Chloroform 20 parts.

Solve. Apply with a brush.—*Med. News.*

A Three-Barreled Penis.—Dr. Luxardo describes a rare anomaly of the penis in a young man under treatment for gonorrhœa. The meatus presented three openings, which corresponded to as many distinct canals. The upper one gave passage exclusively to the seminal fluid, the lower to urine. The middle tube appeared to communicate with the lower one. The gonorrhæa affected only the two inferior ones.—*L'Union Medical.*

Rules for Examination of Urine.—During a private lecture on the pathology of renal diseases, Dr. Formad gave the following practical points as "rules for examination of the urine."

1. Sediment in the urine has no significance unless deposited within twenty-four hours.

2. Albumen in the urine does not indicate kidney disease unless accompanied by tube-casts. The most fatal form of Bright's disease—contracted kidney—has little or no albumen.

3. Every white crystal in urine, regardless of shape, is a phosphate, except the oxalate of lime, which has its own peculiar form, urine alkaline.

4. Every yellow crystal is uric acid if the urine is acid, or a urate if the urine is alkaline.

5. Mucus, casts, pus, and epithelium signify disease of the bladder (cystitis) or of other parts of the urinary tract, as determined by variety of epithelium.

6. The urine from females can often be differentiated from the urine of the male, by finding in it the tessellated epithelium of the vagina.

7. Hyaline casts (narrow), blood, and epithelial casts signify acute catarrhal nephritis. Much albumen.

8. Broad hyaline casts and epithelial dark granular and oil casts signify chronic catarrhal nephritis. At first, albumen; later, less.

9. Hyaline and pale granular casts and little or no albumen signify interstitial nephritis.

10. Broader casts are worse than narrow casts, as far as diagnosis is concerned, for the former signify a chronic disease.

11. The urine should be fresh for microscopical examination, as the micrococci will change hyaline casts into granular casts or devour them entirely in a short time.

12. Uric acid in the urine may in Trommer's test for sugar form a protoxide of copper, thus often deceiving the examiner in the belief that he has discovered sugar. Thus, when urine shows only a trace of sugar, other methods of examination, besides the Trommer's, must be used—preferably the lead test.

13. The microscope gives us better ideas of the exact condition of affairs in the examination of urine than the various chemical tests. Therefore, the time has come when every true physician should know how to handle a microscope. —*Louisville Medical News.*

Nerve-Stretching.—In the Bradshaw Lecture, published in a recent number, Mr. Marshall has shown himself to be a strong advocate of the new operation of nerve-stretching for the relief and cure of pain. British surgeons are ever cautious about introducing novel operations, especially those which, like nerve-stretching, are largely based upon theoretical grounds. In February 1881, we recorded a case where Mr. Marshall stretched the great sciatic nerve on the right side in a man suffering from locomotor ataxy. Nearly three years have passed by, and nerve-stretching still has the high sanction of the present President of the Royal College of Surgeons of England. The risk attending an operation is the first question discussed by competent critics; Mr. Marshall believes that the dangers of nerve-stretching are comparatively few. The lecture included a very able review of the scientific aspect of the subject. It was shown that a long piece of nerve will stretch more, relatively, than a short one, according to a law observed in other extensile tissues. A stretched nerve is now known to recoil, and the extensibility of a living nerve is greater than that of a dead nerve, a fact ever to be borne in mind by experimenters. Nerves bear a far greater amount of stretching than would at first sight be supposed; the slender branches of the fifth cerebral nerve will bear a weight of from six to twelve pounds before breaking, whilst the great sciatic will bear about one hundred and eighty pounds—

though the lecturer did not recommend that a force at all approaching this should be employed in practice. These facts have a highly practical bearing, as an operator, especially if inexperienced, has a natural dread of breaking a nerve which he is stretching, and, therefore, is liable to confine himself to subjecting the nerve to a degree of tension insufficient to produce good results, and, indeed, capable of causing evil effects. A diseased nerve, he is aware, bears less stretching than a healthy one. But, as Mr. Marshall demonstrated, a personal experiment with the dynamometer is sufficient to show any operator how difficult it is to apply to a nerve a weight of thirty pounds.

The lecturer dwelt also on the microscopic appearances of stretched nerves. In specimens prepared by Mr. Horsley, the fibres of the nerve-sheath or epineurium, naturally wavy, appear quite straight, the bundles of tubules are compressed, and the spaces, probably lymphatic, between the perineurium and the fasciculi which it invests, are obliterated. On examining an individual tubule from a stretched nerve, it is found that the natural segmentation of the medullary sheath gives way to an abnormal or irregular breaking up of that sheath, that sometimes the tubule gives way, and more rarely the axis-cylinder gives way. Degenerative changes follow, and involve the vessels and lymphatic elements in the nerve, external to its tubules. Regeneration ensues. Passing to the physiological effects of stretching, it is found that the motor and sensory properties of a nerve are both diminished, but the sensory is the most affected. Slight tension increases the irritability of a nerve, stronger tension diminishes and extinguishes it, a fact of great practical import. The stretching of a nerve is not mechanically transmitted to the spinal cord; it may, in a manner explained by the lecturer, shake the cord, but even then no change of tension is found in the intrameningeal part of the nerve, nor any in the tubules within the cord.

Turning to practical results, Mr. Marshall considered that the fact cannot be doubted that nerve-stretching does and will cure neuralgia. The explanation of this good result lies, to a certain extent, according to the lecturer, in the stretching and partial destruction of the *nervi nervorum* in the sheath of a nerve. Mr. Marshall is a believer in the existence of these nerves that supply nerves. They are liable to iritation at certain points where the nerve to which they are distributed passes round a bone or out of an osseous foramen; hence some of the phenomena of neuralgia may be explained, for, were the tubules of the main nerve the seat of that disease, the pain would hardly be so localised, but would be transferred by the consciousness to the extremities of the tubules. The value of nerve-stretching in tabes is less easy to comprehend. The disease is central, and, as experiments above alluded to have shown, the substance of the spinal cord is not affected mechanically by the tension but it effects the ganglia of the cord, and produces an excitation of the vaso-motor centres, or trophic centres; and to the reaction that takes place in the changes thus produced in the nerve elements, we must look for the explanation of the benefit obtained from nerve-stretching in cases of tabes or locomotor ataxy.

Mr. Marshall, towards the conclusion of his lecture, spoke of the stretching of nerves by flexion of a limb without the use of the knife, as advocated by Trombetta and Billroth. The actual stretching in these cases has been proved by experiment, and very satisfactory results have been obtained.

The Bradshaw Lecture at the Royal College of Surgeons of England, in 1883, is not only an eloquent discourse, but a most valuable essay wherein an operation still new to surgery has received the approval, on grounds publicly demonstrated, of a leading metropolitan surgeon.—*British Medical Journal.*

Dr. A. Van Cerveer, in the *American Journal of Obstetrics*, reports a case of menstruation beginning at the age of four months, and regularly continuing every twenty-eight days until the present time, more than two years.

The Prevention of Horse Accidents.—Mr. C. C. Baird, of the Dick Veterinary College, Edinburgh, has invented an india-rubber frog-pad for fitting into the heels of the shoes of horses, with the view of preventing the animals from slipping and falling on the causeway. The invention is exceedingly simple, and will be of great value to medical men and others who drive horses, especially on asphalt and in frosty weather. The pad can be removed in the evening and replaced in the morning. A set of pads, it may be added, is expected to wear out two sets of shoes. The trial of the invention, we believe, has fully borne out the statements of the inventor as to the merits of the apparatus.—*Medical Press.*

A Leather pad, considered superior to the rubber article, is coming into use in Louisville.—*Louisville Medical News.*

Dr. Barker, of New York, believes (*Am. Jour. Obstet.*, October, 1883) that mechanical obstruction as a cause of dysmenorrhœa exists in only a small percentage of cases; that there are two forms of the diseases, one uterine and the other ovarian. In the uterine variety there are cases which do not depend at all upon obstruction, the pain is due to the effort of the uterus to relieve the plethora by the rupture of capillaries and exfoliations of mucous membrane. He uses the lactate of iron in doses of from three to five grains three times a day, associated with chlorate of potash; as soon as the symptoms of menstruation begin he gives apiol, which he looks upon almost in the light of a specific. In ovarian dysmenorrhœa there is no pain until the flow has continued for two or three days; then the cause was ovarian and the bromide of sodium in ten to fifteen grain doses, in the middle of the forenoon, in the middle of the afternoon, and at bed time, was the proper treatment.

Tears of Blood.—This rare phenomenon, the reality of which has often been doubted, seems, however, to occur under certain circumstances. Damalix has published an interesting paper on this subject in the *Archives d'Ophtalmologie.* He was led to study it by the observation of a case in M. Pana's wards. The patient, a young hysterical girl, said that she had often noticed a flow of blood from her eyes, and spots of blood on her handkerchief after wiping them. For some time the hæmorrhage occurred every night. A careful examination of the eyes showed nothing abnormal, but there were photophobia, facial neuralgia and considerable blepharospasm. This case, as M. Damalix himself says, cannot be considered as conclusive, in spite of the probable veracity of the girl and her parents, as the hæmorrhage was never seen by him. But there are on record some observations which do not leave room for doubt. In a case of Hauser and in another of M. Brun, the observer could actually see the blood flowing from the eyes like tears; there was no possibility of trickery, and microscopical examination of the fluid showed that it was really blood. As for the diagnosis, the name blood tears must not be applied to the various forms or hæmorrhage caused by some organic lesion of the mucous membrane, such as small polypi, etc. The true form has nothing to do with any visible lesion, and the course of the accidents is remarkably irregular. Sometimes there are no premonitory signs, the blood appearing without effort or pain; in other cases the patient feels for some time pain in the forehead, or at the root of the nose, or, it may be, a feeling of tickling and heat in the lids, which disappears when the blood begins to flow. The amount of blood lost varies from a few drops to a wineglassful; the flow never lasts more than a few minutes, is always intermittent, and generally coincides with other hæmorrhages in the skin or mucous membranes, or, on the contrary, with *suppressio mensium.* A study of the etiology of the disease shows that it is most frequent in hysterical women suffering from anæmia or hæmophilia.

THE LATE DR. MARION SIMS.—At the meeting of the New York Academy of Medicine, on November 15th, Dr. F. V. White, the statistical secretary, announced the death of Dr. J. Marion Sims, for many years an honored Fellow of the Academy. The President, Dr. Fordyce Barker, said that, by the death of Dr. Marion Sims, the Academy of Medicine and the profession of New York, and, indeed, of the whole country, had lost its most brilliant and original genius in the department of surgical gynæcology. If circumstances had forced him into other branches of surgery, his promptness and fertility in practical procedure, his intuitive power of conception of new means to secure any desired result, his endowment of invention, and his wonderful mechanical adroitness, would undoubtedly have secured for him equal eminence in any of its departments. No one, he thought, could be compared to him in his own special field except the late Sir James Y. Simpson, whom, indeed, he closely resembled in many respects. The resemblances of these two great men were much more numerous and striking than their points of contrast. To speak of the greatest achievements of each—the one had won for himself imperishable fame by his courage and ardent zeal, carried almost to rashness, in successfully introducing the use of anæsthetics for the relief of the agonies of parturition, and the other by devising new methods of physical exploration, and new surgical procedures. Both men were incessant, zealous workers, who, for many years, were constantly making contributions of positive worth to the store of knowledge of the profession. The former added more to scientific literature, and the latter more to the practice of his art. In concluding, Dr. Barker announced that he would appoint Dr. Thomas Addis Emmet to read a memoir of Dr. Sims at the first meeting of the Academy in January.

TOBACCO AND THE PULSE.—Dr. Troitski has made a number of observations upon the effects produced on the temperature and pulse by smoking. He found that in every case, varying according to the condition of the individual, there was an acceleration of the pulse rate and a slight elevation of temperature. If the average temperature of non-smokers were represented by 1,000, that of moderate smokers would be 1,008; and while the heart in the former case was making 1,000 pulsations, in the latter it would beat 1,180 times. It is in the latter effect that he thinks the danger of tobacco smoking is manifested.—*Journal de Médecine de Bruxelles.*

HOW DIMPLES ARE MADE.—This is the way dimples are manufactured in Chicago, if a reporter of the *Herald* of that city tells the truth:

"My arm being bare and the exact spot indicated, he (the operator) placed a small glass tube, the orifice of which was extremely small, upon the spot. This tube had working within it a piston, and was so small that when the handle was drawn up the air was exhausted from the tube and it adhered to the flesh, raising a slight protuberance. Around this raised portion the operator daintily tied a bit of scarlet silk, and then took away his suction machine. The little point of skin that was thus raised he sliced off with a wicked-looking knife, bringing the blood. I tried hard not to scream, but it was so unexpected that I had to. Then he bound up the arm, placing over the wound a small silver object like an inverted cone, the point of which was rounded and polished. This little point was adjusted so as to depress the exact centre of the cut. Then he told me to go away and not touch the spot until the next day. When I came at that time he dressed my arm again, and this operation was repeated for five days, when the wound was healed. The silver cone was removed, and there, sure enough, beneath it was the prettiest dimple in the world! And all I had to pay was $10."

Curing an Epileptic Fit by Using a Stomach Pump.—A Polish Jew fell unconscious at the Bowery and Grand street December 27th, and a crowd of pedestrians stopped to gaze upon him as he lay writhing and foaming at the mouth on the icy sidewalk. Patrolmen of the Tenth Precinct, with the assistance of some of the bystanders, took the insensible man to the Eldridge street station. While he was being dragged across the floor a vial containing a greasy fluid, and bearing the label "poison," fell out of his pocket. Sergt. Granger, who was in command at the station, at once jumped to the conclusion that the man had attempted suicide by taking poison. He telegraphed to Police Headquarters for "an ambulance and a stomach pump." This urgent message was repeated to the Chambers street Hospital, and an ambulance was soon at hand. The young surgeon who accompanied the ambulance looked at the unconscious man, shook his head at the contents of the vial, and apparently coincided with the diagnosis of the police sergeant. He administered an emetic, but as this did not have the desired effect the young doctor rigged up his stomach pump. He was soon actively pumping out the contents of the unconscious man's stomach. Inspector Murray and Sergt. Meakim, of his staff, strolled into the station and were interested spectators of the pumping process.

The heroic treatment had the effect of bringing the man to his senses. He proved to be Aaron Eckstein, a "goose merchant," of No. 37½ Essex street. He protested indignantly in very bad English against the treatment which he had received. The young doctor asked him blandly what poison he had taken. Eckstein fairly danced with rage. "Pison! pison!" he shouted; "I dond dake no pison! Fits! it's fits!" The young doctor shook the poison-labeled vial in his face, and Eckstein smiled sardonically. "Dot's not pison, dot's liniment," and he rubbed his left shoulder with his right hand. It appears that the unfortunate "goose" merchant is subject to attacks of epilepsy, and it was in one of these that he was found in the Bowery. The previous day he had fallen in a fit in the street and hurt his shoulder, and the liniment had been given at the Chambers street Hospital. When the youthful ambulance surgeon realized his mistake, he packed up his stomach pump and left the station hastily.—*Times.*

Resection of the Stomach.—At the Medical Congress of Olten, Professors Kocher of Berne and Sockin of Bâle presented a report of cases of cancer of the pylorus treated by resection of the stomach. Thirty cases of resection of the stomach have been reported in Germany alone; of these ten have ended in recovery. In twenty-six of the cases there was cancer, and in four ulcer of the stomach; three of the latter made a rapid recovery; seven only of the cancer cases recovered. In two of the latest cases occurring in women forty years of age, the digestive functions were completely re-established.

New Method of Tooth Drawing.—A dentist of Geneva has invented a new and ingenious process of tooth-drawing. A small square of india-rubber, pierced with a central hole, is pushed over the tooth till the upper part of the root is reached. The India-rubber gradually contracts, pulls on the root, and the offending tooth is finally enucleated, without causing the patient any pain whatever. Four or five days are generally required to complete the operation. Very slight bleeding and a slight swelling of the gum are the only inconveniences experienced. M. Paul Bert brought this ingenious method before the Académie des Science in Paris, when M. Galippe remarked that the process was already known, and quoted a case in support of its efficacy, in which a young girl placed a ring of india-rubber round her two front incisors, and forgot she had done so; the result being that she lost the teeth.

Acute Intussusception Successfully Treated by Injection of Air and Inversion.—A little girl, between three and four years old, had been ill for about forty-eight hours with vomiting and diarrhœa. On visiting the patient, she was found to be very pale and prostrated. Her symptoms had come on suddenly, and consisted of constant vomiting, so that no nourishment could be kept on the stomach. She had tenesmus, accompanied by continuous discharge of bloody mucus; and no stool had been passed since the commencement of the illness. Examination of the abdomen revealed no tumor; but, on introducing the finger into the rectum, the usual sausage-shaped tumor was most distinctly felt.

Having nothing at hand but a Higginson's syringe, I attempted to inflate the bowel with this, but did not meet with much success, as the air kept escaping. I therefore suddenly raised the child by the heels, and kept her inverted for a moment. Examination per rectum immediately afterwards could detect nothing abnormal, the previous tumor having disappeared.

The next day, on calling, the mother informed me that the child had been quite well ever since I left; had eaten and retained the food; and that all the symptoms had been in abeyance ever since what she called "the operation." The child is now quite well, some months after the illness recorded above.

The diagnosis is made quite certain by the peculiar grouping of the symptoms. The sudden onset, tenesmus with bloody mucus, vomiting, no passage of stool, the general state of prostration, the discovery of a tumor per rectum, the sudden and entire disappearance of urgent symptoms, and complete cure after insufflation and inversion, point conclusively to intussusception as the cause.

M. G. Biggs, London.

Disinfection by Corrosive Sublimate.—Dr. Tarnier, Surgeon to the Paris Maternité, has the greatest confidence in Van Sweiten's liquid, employed as an obstetric antiseptic. The midwives and pupils all wash their hands in this liquid, and the whole of the genital region of the patient is washed and injected with a solution of corrosive sublimate at a strength of two-thousandths. Prior to delivery the injection is renewed every three hours, and no accidents from its employment have ever occurred.

Dr. Tarnier proposes the disinfection of napkins and mattresses by the same means.—*Times and Gazette.*

A death from "soothing syrup" having occurred in Brooklyn, the coroner's jury have very sensibly recommended the passage of a law by the Legislature forbidding the sale of such preparations except on physician's prescriptions.

Alteration in Flour through the Action of the Sun.—It frequently happens that wheat or rye flour, in spite of the greatest care in baking, yields an inferior loaf, and the failure is commonly attributed to adulteration; but when submitted to investigation neither microscopic nor chemical tests reveal any adulteration. Such flour is returned to the miller or dealer as unfit for use. The miller says the flour was injured by the heating of the stones, and the dealer attributes the defect to the circumstance that the sun must have shone upon the sacks during transportation. It has been proved by numerous experiments that flour cannot bear the action of the sun, even when not exposed directly to its rays. When flour is exposed to the heat of the sun an alteration takes place in the gluten similar to that produced by the heating of the stones. For this reason it is advisable that the transportation of flour should take place, if possible, on cool days or by night, as well as that flour should be stored in a cool place.

Huxley's Experience as a Physician.—"Some forty years ago I was very familiar with certain portions of the East End—one of those waterside portions where you find all the peculiar conditions of the East End in their typical state. I was at that time engaged in the business of my original profession of medicine, and it was my duty to attend the poor of the parish in that particular region. I therefore became familiar with their lives in a manner which is rarely possible to any but the clergyman and the doctor. I remember as if it were yesterday the condition in which a great portion of those people lived, and it was such that I found in those recent statements which have been brought before you nothing specially novel and nothing unfamiliar. A great majority of the persons who used to come to me complaining of this and that were simply undergoing slow starvation, mitigated by bread and the stuff to which they gave the name of tea. I remember as if it were yesterday a poor deformed creature who was earning her living by making shirts, who came to me with those complaints—illness and weakness, and all the rest of it—and to whom I said, what was quite true, 'You want nothing but food.' I recollect the woman throwing out her hands and showing a few half-pence, hardly sufficient to cover her palms, and exclaiming, 'If that be so, how am I to get food?' I have spent hours in a den in which there was scarcely room to turn, attending to the sufferings of a woman who was about to add to a numerous family, the ordinary resting-place of whom was underneath the bed. . . . I left that scene to my great satisfaction, and sometime after embarked on a voyage around the world, where I had an opportunity of seeing savage life in all conceivable conditions of savage degradation, and I can assure you in this experience of mine I found nothing worse, nothing more degrading, nothing so hopeless, nothing nearly so intolerably dull and miserable as the life I had left behind in the East End of London. For although the savage may perish of hunger or violence, and never knows whether his life may be his own twenty-four hours, yet there is life in him, he is a man, he is not a mere machine ground down to bring out so much mechanical energy at the expense of so much food; and I must certainly say that if the alternative were presented to me to choose between the life of one of those people in the East End or that of the savage, I would distinctly choose the latter.

Dr. H. C. Wood's Syphilitic Test.—Persons are often unaware that they are suffering from syphilis. They honestly believe that they never had primary or secondary symptoms; these symptoms may, however, have been present, but so slightly marked as not to attract attention. Again, this is one of the points about which human nature often fails. People, even when death is staring them in the face, and their lives hang upon the truth, will make false statements. As we have a touchstone by means of which we are able to decide whether or not a patient is suffering from cerebral syphilis, I ask no questions, but apply the test where I have reason to suspect any disorder. It is a serious matter to mercurialize a patient, but it does no harm to produce iodism, so that when making the test I always employ iodide of potassium. If I find that ten grains three times a day produces symptoms of iodism I am almost sure that the case is not one of specific disease. If, on the other hand, the patient takes from one-half to one drachm of iodide of potassium and waxes fat thereon, I am almost sure that he is the subject of specific disease. There are some persons, not syphilitic, who will stand large doses of iodide of potassium, but such cases are rare, so that when a patient will take half a drachm of the remedy three or four times a day it may be concluded that he is syphilitic. I say this with one reservation. Persons who have gradually accustomed themselves to the use of iodide of potassium, as for instance, those who are asthmatic, will stand large doses of this drug, even when not suffering from syphilis.

In such a case there will be the history of the long-continued use of the remedy. You must remember, also, that there is a syphilitic asthma, so that the relations of iodide of potassium to asthma are in many cases easily explainable. I shall speak of the method of using iodide of potassium when I come to consider the treatment.

TYNDALL ON EVOLUTION.—Professor Tyndall says on this subject: "If asked whether science has solved, or is in our day likely to solve, the problem of the universe, I must shake my head in doubt. Behind, above, and around us, the real mystery of the universe lies unsolved, and, as far as we are concerned, is incapable of solution. The problem of the connection of the body and the soul is as insoluble in its modern form as it was in the pre-scientific ages. There ought to be a clear distinction made between science in the state of hypothesis and science in the state of fact, and, inasmuch as it is still in its hypothetical stage, the ban of exclusion ought to fall upon the theory of evolution."

THE NEZ PERCES ON THE INDIAN RESERVATION BEING DESTROYED BY MALARIA.—Dr. Woodward, an intelligent young physician employed by the Government, resides among them, and divides his time between them and the Poncas. He has charge of the commissariat and a general oversight of affairs. I said to him: "Do you know anything against these Indians?" He replied: "I do not. They are the best Indians I ever met." "How many tribes have you known?" "I have known four pretty intimately." "How do these compare with the rest?" "They are far above them in every way." "Do you regard them as a virtuous tribe?" "Yes, sir." "How many half-breeds are there among them?" "Only two." "Have you ever known of their stealing anything?" "Never. I have known them two years, and have not known a single instance of theft. We never lock our commissariat for fear that they will steal." "Are they law-abiding?" "Yes, sir. There has not been a crime committed since I have been here." "What about their family relations?" "They are strongly attached to each other, and passionately fond of their children." "Are there any polygamists among them?" "Not more than three or four, and they are of the wild Indians." "What are the prevailing vices among them?" "That's a hard question. They don't drink. They don't gamble, steal, or dance. I do not know that they have a single vice." "Doctor, what are their prevailing diseases?" "Malaria, pneumomia, and consumption. Last year I gave them over a hundred ounces of quinine." "Are their children healthy?" "No sir; there are but three young children among them." "How do you account for the fact that out of 100 families but three small children are living?" "On account of the change in the climate. These are mountain Indians, and cannot live here. With but three exceptions no children that have heen born to them here have reached the age of three years." "If they are not removed to a more healthful region what is your opinion as to the result?" "Their fate is inevitable. They are doomed. They must dwindle down and become extinct, and this is not only true of them, but it is true of other Indians. Look at the Pawnees. When they came here in 1875 they numbered 2,630; they now number 1,219. The Nez Perces came three or four years ago, numbering 430; they now number 320. I came here in 1881 from Nebraska, and we brought 100 head of horses. In four months 36 of them died. I take my quinine almost as regularly as I take my meals."

LUMINOUS paint has been applied to harness with desirable results. At night the position of the horse is clearly indicated, and it does not appear that the animal is alarmed in the slightest by his bright equipment.

The Electrical Treatment of Extra-Uterine Pregnancy.—The *New York Med. Jour.*, March 10th, 1883, says: We recently commented upon a paper by Dr. A. D. Rockwell, on "The Successful Treatment of Extra-Uterine Pregnancy." We would now call attention again to that one of the author's seven cases which was one of associated intra-uterine and extra-uterine gestation. This, it would seem, is an exceedingly rare complication; for, according to Dr. B. B. Browne, of Baltimore, whose researches into the literature of the subject appeared in the last issue of the "Gynæcological Transactions," but twenty-four reported cases could be found. In one of these cases, the extra-uterine fœtus passed down upon the posterior fornix, and was removed through the vagina. This was followed by the birth of the intra-uterine child alive, and the recovery of the mother. In three other cases laparotomy was performed, with fatal results to the mother in all. Of the twenty remaining patients who were left to nature, eleven died, while none recovered by the discharge of the fœtal remains through the process of ulceration. But, of the whole number, the child survived in seven cases.

The weight of Turgenieff's brain has led in Russia to an active discussion of the general subject of brain weights. M. Nikifaroff, a well-known scientist, in a recent article declares that the weight of the brain has no influence whatever on the mental faculties. He gives the average weight of a man's brain as 1,424 grammes, and that of a woman's as 1,272, though the averages given by Krause are 1,570 and 1,350, respectively. The maximum weight Nikifaroff gives as 1,600 grammes, the minimum as 800. The brain of Haussmann, the celebrated mineralogist, weighed only 1,206 grammes, or considerably less than the average weight of a woman's brain.

Judicial Hanging In India.—Mr. Shirley Deakin, F.R.C.S., Superintendent of the District Gaol, Allahabad, sends us notes on fourteen cases of judicial hanging. From his report, which is drawn up with great care, we gather that the last behest of the law is carried out in strict conformity with the regulations that the culprit "shall hang by his neck till he be dead," for in not a single instance were the vertebræ fractured or dislocated, nor was the spinal cord injured. The length of drop allowed is about six feet, and this Mr. Deakin thinks amply sufficient. In the first execution that he witnessed, the noose of the rope was placed in the middle line in front, and the struggling of the criminal was violent and painful to witness. In the subsequent cases he had the knot placed at the side of the neck, with the object of compressing the vagus nerve and so inhibiting the cardiac and respiratory functions. The result, he tells us, was quite satisfactory. As a rule, the epiglottis is torn or the hyoid bone or laryngeal cartilages fractured; once the trachea was completely ruptured. The inner coat of the carotid artery was abraded in two cases. It is customary in India to use a silken rope, which costs about £7, and to grease it each time it is called into requisition. The gallows, as Mr. Deakin found it, was of primitive construction, consisting of four upright posts, ten feet high, with a platform resting upon the top. This was reached by a ladder, which the doomed man had to climb. The drop was effected by pulling away the two front posts. Mr. Deakin modified the apparatus by placing a trap door in the centre of the platform, so that when the bolt is withdrawn the door swings down on its hinges and hides the victim from view. Mr. Deakin relates a case in which the long drop was employed; the structures of the neck gave way and the head was torn from the body, a casualty not unknown to home experience. Our correspondent deprecates the practice of judicial hanging, believing it fails to act as a deterrent from crime; at any rate, in the colored races, who meet their fate with calm indifference.—*Lancet.*

MEDICAL NEWS.

COMPULSORY EXAMINATION OF A FEMALE PLAINTIFF IN AN ACCIDENT CASE.—A case in this State was recently commented on where the Court refused to order a compulsory examination of a female plaintiff in an accident case, to see whether she had not some other ailment besides the hurt caused by the accident. A case involving the right of the Court to order a medical examination is presented in one of the Western States, but under circumstances entirely different from that mentioned above. In this latter case there was a permanent injury to the eyes, and no medical examination had been had at any time, and the Court held that it had the right to order such examination.—*Record.*

DR. T. HAYNES removes parts of the spermatic ducts in place of the testicles, in cases of hopeless masturbation and nocturnal emissions, effectually destroying the sexual desire(?)—*Boston Med. and Surg. Journal.*

THE British Medical Association will hold its next annual meeting in Belfast, Ireland.

THE library of the Surgeon-General's office in Washington is said to be more extensive than the best libraries in England and France, and superior in the general character of the books.

THE HOSPITAL SATURDAY AND SUNDAY FUND.—One hundred and seventy-five of the 340 churches in the association have been heard from, and at that time the total received amounted to $42,000. The account will be kept open until February 1.

THE ST. LOUIS COLLEGE OF PHYSICIANS AND SURGEONS.—According to a newspaper dispatch, eight of the professors and all the students have withdrawn from the college, the trouble being attributed to financial mismanagement.

AT a late meeting of the Medico-Chirurgical Society of Edinburgh, Dr. W. Craig presented a collection of new and rare drugs from the laboratory of Parke, Davis & Co. The collection contained twenty-eight specimens of drugs. They were exhibited in the most attractive form, and commanded the attention of all interested in new preparations. The exhibitions of the same firm at Vienna were rewarded by the greatest interest on the part of those best able to judge of such things.

IT seems that doctors are not admitted to laboring men's unions, for the reason as a laboring man lately stated to the Blair committee, that they are "too previous."—*New York Medical Journal.*

A SUIT TO ANNUL THE CHARTER OF THE ECLECTIC MEDICAL COLLEGE.—At the instigation of the Medical Society of the County of New York, Attorney-General Russell has begun in the Supreme Court, in the name of the people of the State, a suit for the annulment of the charter of the Eclectic Medical College of the City of New York. It is alleged that the officers of the college have persistently disregarded the restrictions of its charter respecting the issuance of diplomas, and by improperly licensing unqualified persons to act as physicians, have done injury to the public.

PARKS.—New York has at present but 1 acre to every 1,363 inhabitants, while London has 1 to every 205 inhabitants, Paris 1 to 13, Vienna 1 to 100, Berlin 1 to 235, Philadelphia 1 to 300, Chicago 1 to 200, St. Louis 1 to 167, and Boston 1 to 190.

ST. LOUIS, Mo., Medical College is "in a bad way." The faculty consists of three doctors, and the class of five students. It owes $7,000, and its receipts are at an end.

THE Cartwright lectures for 1884 will be delivered by Professor Burt G Wilder, M.D., of Cornell University, at the hall of the Young Men's Christian Association, corner of Twenty-third street and Fourth avenue, on the evenings of February 2, 4, and 6, 1884. The general subject will be "Methods of Studying the Brain."

THE Governor of Texas has, in a message to the Legislature, advised that vaccination be made compulsory in the State.

DIED, at Alexandria, on January 20, 1884, M. M. Lewis, a prominent physician of that place, and well known for valuable services rendered in the Confederate army.

A MALICIOUS suit was lately brought against Dr. David Webster by one Dr. Robert H. Hayes, the action being for alleged malicious prosecution and false imprisonment, Dr. Webster having prosecuted Hayes for practicing medicine without compliance with the provisions of the law. Hayes sued for damages in the sum of $50,000. The defense was that the defendant acted as president of the Medical Society of the County of New York in the matter, and that the result of the action brought by the society was only to compel Hayes to comply with the law. Judge Freeman directed the jury to find for the defendant, and such was the verdict.

MARRIED, on December 12, 1883, by the Rev. Dr. Petrie, Dr. William H. Shackford, of Virginia, to Miss Collie E. McLelland, of Montgomery, Ala.

DR. J. McF. GASTON, whose excellent and instructive papers, from Brazil, gave so much pleasure, has returned to his "country" again; not to the Palmetto State, but to the one adjoining. His address is now 28½ Broad street, Atlanta, Ga. It is very probable that he will give to the American public, through this JOURNAL, his reminiscences of Brazil, and take the opportunity, while so doing, of presenting much of the valuable results of his varied experience in his recent home.

AT the last quarterly meeting of the Illinois State Board of Health it was decided not to recognize diplomas of the United States Medical College in the future.

THE New York Post-Graduate Medical School has taken a building in East Twentieth street, between Second and Third avenues, four stories in height, and having ninety-five feet frontage, into which it moved about the first of February. This will give ample room for the present work of the school, as well as for a hospital department, which is to be established. Bedside instruction will then be given under the same roof with the regular courses. This school is doing admirably.

NEW TREATMENT.—Doctors are always ready to hear of new remedies and new prescriptions. A Mr. McGregor of this State has discovered an infallible prescription for that dire malady in a wife, constant scolding. His prescription is a rat. He procures a cage full of them, and as soon as he wishes to cure an attack of scolding, he opens the cage and gives his prescription. If one is not sufficient he repeats it. The worst attack is cured by the above prescription.

SENATOR HALE introduced in the Senate in January a bill "to secure to the medical profession equal rights in the service of the United States," which provides that all appointments to medical service under the Government shall be made from graduates of legally chartered medical institutions, without discrimination in favor of or against any school or theory of medical practice.

DR. WILLIAM BRODIE, of the *Therapeutic Gazette*, Detroit, Michigan, has been appointed surgeon-in-chief of all the Grand Trunk Railroad lines west of the Detroit River. A good salary is attached to the office. It is a good appointment, and a decided honor conferred upon one most worthy of it.

THE *Therapeutic Gazette*, of Detroit, Michigan, Dr. W. Brodie, editor, is again enlarged. It is beautifully issued, admirably edited, and has most probably the largest circulation of any medical journal now known. It is published for the marvelously low price of one dollar. It is an admirable journal.

DIED, at Albany, N. Y., January 31, Dr. Elisha Harris, Secretary of the State Board of Health.

MARRIED, on January 31, in this city, by the Rev. George W. Douglas, Dr. B. F. Dawson to Julia Douglas, daughter of the late George Merritt.

THE *Medical Gazette*, a weekly of this city, is discontinued, and the *Æsculapian*, a monthly, takes its place, or may do so.

THE *Medical Archives* of this city is not extinct, but will be continued.

THE *Archives of Laryngology* will be discontinued.

EDITORIALS.

WHAT IS WANTED IN A JOURNAL.—One who has had every number of this JOURNAL since January, 1866, visited this office during the past month, and, after the many greetings of an old and valued friend, the subject which forms the caption of this notice was brought up for discussion. He said that he was one of the only two subscribers to the JOURNAL in his county, and that he so much regretted the fact. He was asked what journal seemed to be the favorite in his section; one of the best in the Old Dominion? He replied that he was almost unwilling to say as he was ashamed of the fact. However, after due persuasion, he confessed the truth, and replied that the journal most "taken" in his section was the *St. Louis Brief*. He was mortified over the humiliating fact for his county, and his listener was even more mortified for the sake of his profession in one of the grandest and greatest of the old States. The Old

Dominion giving in one of its best counties its greatest support to such a publication!! The friend and visitor endeavored to explain that he had tried to shame his medical neighbors into relinquishing their support of what he termed the Peter Parley of medical journals—the journal best adapted, if not to the babes and sucklings of the medical world, at least to the veriest children in medicine. And then there was long and due silence after this confession—a silence that was natural; the tribute to a great old State; the lament over her misfortune, and her lapse from her former great estate in medicine.

The *St. Louis Brief* the great favorite in Virginia! "Tell it not in Gath," even though some may not be ashamed to "proclaim it in the streets of Askalon!"

And then there came up the question, the very natural question, What is desired in a journal?

The visitor said that articles by classic writers in this country and in Europe were, by many of his friends, regarded as too "high," too elaborate, and too long. Such articles, any one of which he regarded as worth the annual price of a journal's subscription, were rejected and repudiated; while little paragraphs as to what is "good" for familiar diseases were devoured and remembered. It was mutually conceded, in the interview, that, of course, nothing worth learning could be conveyed in a paragraph, and that elaboration was essential to a demonstration of all truth; and it was also mutually admitted that it was only the worthless writers who were weak enough to suppose that any subject could be presented in a few paragraphs. Still, it was undeniable that such writers (the paragraphs idiots) were the most popular, and that they were admired, while the great writers were shunned by many of the rank and file of the profession. It was also granted that such facts were not peculiar to the Old Dominion, but that such an unfortunate condition, such a malady indeed, is widespread throughout the ranks of the American profession. If this then be so, what, as was argued, was the cause? Does the reader anticipate the natural deduction, the concluclusion reached at the close of this casual meeting? Doubtless. It was, that so long as the medical colleges, endowed and unendowed, are so prolific in their broods of half-taught graduates annually thrust upon the States, it was impossible to find among the younger physicians more than a very few who desire, in medical literature, elaborate expositions of scientific truth; while the mass of younger readers must be of such professional calibre, as to find enjoyment in the lucubrations of paragraph idiots, and in the prescriptions given so profusely in that class of periodicals of which the visitor had mentioned the type.

The application of these facts to the management of this JOURNAL is, of course, very natural and proper. During the past year many, very many classic papers from justly distinguished writers have been given. Were they too long, too many? Or would it have been better to give prescriptions and paragraphs?

There is a vast deal of folly spoken and written in regard to what are termed "long-winded" articles, but is there any one but a fool who would undertake to present a subject intelligibly unless with care and elaboration? And is there any one but a fool who could expect that such an act could be performed? Lord Bacon has well said that the wise man is "he who knows something about everything and everything about something." It is true that one may learn something about everything in paragraph journals, but a little learning, dangerous to every one, is particularly dangerous to the physician; and if he wishes to know everything about anything this is only possible by studying it carefully and at length. To do this, to enable any one to do it, he must have material presented by masters. Articles, classic in diction and in discussion, by those who are acknowledged teachers; papers which give value and reputation to medical science and to medical men, and which form, in part, the glory and ornament of medical literature.

THE LONGEVITY OF DOCTORS.—Judging from the great age of the survivors of the battle of Waterloo, participation in that battle was the surest means of longevity which an Englishman of that day could take. Of course this resource is no longer open to persons desiring to live beyond three-score years and ten, but such persons can accomplish nearly as much by becoming doctors. Twenty-six eminent physicians and surgeons have died in England during the last four years, all of whom were over 80 years of age, and nine of whom were over 90. The two who had attained the greatest age died at 95, and began their profession as army surgeons. These two may possibly have laid the foundation of their longevity at the battle of Waterloo, but, however this may be, the fact that medical men live to a great age is sufficiently established.

The popular idea of a doctor's life is that he is exposed to dangers that ought to cut him off at an early age. As a medical student he is believed to undermine his constitution with tobacco and spirits, and to run the risk of inflicting fatal wounds upon himself with the dissecting knife. When in active practice he is supposed to be dragged out of bed at all hours and in all weathers to attend to his patients, and to be constantly exposed to the danger of contracting infectious and contagious diseases. The wonder is that a man engaged in such a profession ever lives to middle age, whereas, as the statistics above quoted show, he has an excellent chance of living to be 80 or 90.

The facts undoubtedly are that in a doctor's daily life there are conditions which are eminently favorable to longevity. First among these is the fact that a doctor never takes his own medicines. Men who are not doctors take large quantities of medicine, and it has been computed that the average adult man takes seven quarts of liquid medicine, three pounds of powders, and two hundred pills annually from the time of his birth until his death. About a third of this enormous quantity of medicine is taken without the advice of a physician, and the remaining two-thirds are given by medical advisers. Now, a doctor not only never takes his own medicines, but he very seldom calls in another physician to prescribe for him, well knowing that medicines are to be taken only when their use cannot be avoided. This gives the doctor an immense advantage over ordinary men, in spite of his greater liability to contract contagious and infectious diseases.

Then, too, a doctor takes a great deal of exercise. It is true that he takes little exercise in the course of his office practice, but his out-of-door practice, compelling him, as it does, to hurry from one house to another and to climb innumerable stairs, gives him the exercise which men of other professions fail to obtain. Then, again, he sleeps more soundly than other men. Knowing that he may be called up at any hour, he goes to bed with the resolution of compressing as much sleep as possible into the briefest time; and the concentrated sleep thus obtained does him more good than many hours of light and uneasy slumber.

To these healthful features of a doctor's life may be added the pleasures which his profession yields. The surgeon meets with a constant succession of delightful amputations, and is liable to be agreeably surprised every day of his life with unusual abscesses and novel tumors, upon which he can exercise his ingenuity and his knife. The physician meets with quantities of interesting diseases, and is always hoping to be the first to describe some new disease to which his name will be forever attached, like the popular diseases discovered by Messrs. Bright and Cox, respectively!! If the doctor is successful, as nearly all doctors seem to be, there flows in upon him a constantly increasing stream of fees, and a lucky pestilence, or a fortunate series of explosions and railway collisions may at any time make the physician or surgeon a rich man.

It is thus easy to understand why members of the medical profession live to

a great age. Almost as easy, in fact, as it is to understand why their patients seldom rival them in longevity.—*Times.*

Formation of a Second New York County Medical Society.—The bitter fight which has been waged by the adherents of the old and new codes of medical ethics has terminated, as was predicted, in the formation of a new county medical organization in this city, and in the beginning of an organized effort to carry the profession in this State back into the American Medical Association. Far-seeing members recognized from the day the New York State Association resolved to allow physicians to counsel with doctors other than those of the old school that the schism would be a serious one. When the National Association refused to admit to its deliberations the representatives of the New York society this opinion was strengthened, and the decision of the State Association not to send delegates to the National Association confimed it. The contest has been very bitter in the New York County Society, but the new-code men have had a majority and have elected their officers.

The numerical strength of the New York County Society has enabled it to practically control the action of the State Association. Recognizing the fact that they were in a minority, the old-code men last year formed "The Central Organization of the New York State Medical Association to Uphold the National Code of Ethics," and began a careful canvass of the State. The council included Drs. Abram Du Bois, J. W. S. Gouley, William T. Lusk, Austin Flint, Austin Flint, Jr., John H. Hinton, Samuel S. Purple, Samuel G. Hubbard, and T. Gaillard Thomas. Dr. Gouley was made secretary. Circulars were sent out through the State propounding this question: "Are you for the national code, the new code, or no code?" Replies were received from the doctors themselves in many cases, and when this failed, the secretaries of the county societies furnished information. In all, 5,219 physicians were asked to assert their preferences. A proof of the tables prepared from these replies, and from what is believed to be reliable information obtained from other sources, was issued. The tables were arranged by counties. It was shown that out of the 5,219 physicians questioned 2,442 favored the national or old code, 943 the new code, 210 no code at all, 31 failed to make their preferences clear, and 1,611 were not heard from. Of the physicians in New York, 770 favored the national code, 423 the new code, 58 no code, 10 failed to make their preferences clear, and 445 to respond to the circulars addressed to them. A copy of this proof was sent to every physician whose name appeared in the list, and he was asked to correct any errors which he might find, in order that an accurate list might be issued. It is believed that the doctors addressed included nearly every old-school practitioner in the State.

The result of the canvass led the council to believe that a large majority of the doctors of the State preferred the national code, and that the profession of the State had been placed in a false position through the preponderating influence of the New York County Medical Society. It was resolved to begin the work of reclaiming the State from the new-code men by organizing an old-code county society in New York. The project was talked over, and an organization was effected. The meetings were informal and private, and devoted principally to discussion of ways and means. The organization was named the New York County Medical Association. Dr. William Detmold was elected President, Dr. Charles Leale, Vice-President, and Dr. E. A. Judson, Secretary.

The first regular meeting of the association was held at the College of Physicians and Surgeons in January. The hall of the college was crowded with friends. On that occasion Dr. Austin Flint, Sr., read an exceedingly valuable paper on the relations of the bacillus of Koch to tuberculosis, and Dr. William H. Welch presented an interesting specimen of echinococcus of the liver.

Wine as a Social Drink.—The New York *Times* relates a remarkable story of a Sheboygan (Wis.) physician. It seems that he did not take kindly to surprise parties, with which well-meaning but injudicious country people are wont occasionally to assail their advisers. One night, just after he and his wife had retired, the surprisers came down about thirty strong. The victims arose, dressed themselves, and welcomed the invaders with cordiality. There was only one thing which seemed to mar the doctor's delight at seeing his "friends," this was his fear lest they might have contracted typhoid fever by passing near a sewer opening at some distance from the house. He told them that although in the day-time the sewer gas was comparatively innocuous, he should be afraid to pass within reach of it at night, and that he could not bear to think that his friends should have incurred any risk of health by their delightful and unexpected visit to his humble home. The "friends" laughed at his fears, and refused to be in the least degree alarmed. They made themselves at home by scattering cake crumbs on the carpet, and playing airs from "Pinafore" on the piano. When the physician brought out wine, they accepted it gladly, and there was not one who refused his earnest request to drink a full glass of wine to show their hearty goodfellowship. Five minutes later a strange silence fell simultaneously upon the assemblage. Strong men began to grow pale, and several ladies remarked that it was very late, and that they must immediately go home. The good physician said he was afraid that some of them were beginning to feel the effects of that sewer gas, and begged them to try a little more wine, but they all declined, in much haste, and began looking for their hats in a hurried and preoccupied manner. One man rushed suddenly for the door and vanished without hat or overcoat, and in a few moments the invaders began a panic-stricken retreat. In vain did the physician urge them to stay and have a dance. In vain did he press more wine upon them, and offer to have some nice chops cooked if they would only wait a little longer. They fled, without waiting to say good night, and as the doctor and his wife stood smilingly at the front door, holding the lamp to light them on their way, strange and awful sounds came through the darkness of the night, and the fence on the opposite side of the road seemed to be hung with limp and agonizing criminals. The next day the physician was sent for by twenty-seven of the thirty marauders, who informed him that they had been taken suddenly ill from the effects of sewer gas, and were on the brink of typhoid fever. He soon cured every one of them, and thus laid the foundation for what promises to be a large and successful practice. The physician has since replenished his stock of antimonial wine, and frequently remarks, that he greatly enjoys surprise parties, and will always be happy to have his friends call on him at midnight and take a friendly glass.

Yale College.—Favorable Report on its Sanitary Arrangements.—New Haven, Jan. 30.—A circular signed by President Porter, of Yale College, has been issued giving the report of a special committee appointed to inquire into the sanitary condition of the college buildings. The investigation was deemed advisable in view of the alarm and exaggerated rumors to which several cases of typhoid fever gave rise. The committee consisted of Dr. C. F. Chandler, of the School of Mines in Columbia College and until recently President of the Board of Health in New York; Dr. C. A. Lindsley, of the Yale Medical School and Health Officer of New Haven, and Prof. W. H. Brewer, of the Sheffield Scientific School and a member of the State and City Boards of Health. They report to President Porter that they have carefully examined Durfee, Farnam, and North Middle buildings, and find that the plumbing arrangements are in accordance with the latest and most approved methods of sanitary science. No sickness, they think, can be justly attributed to local causes in either building.

Durfee and Farnam Colleges were selected for examination for the reason that they had been subjected to special criticism and suspicion. North Middle College resembles all the older college buildings in its arrangements for drainage and all together are controlled by one system of sewerage. Prof. Brewer, in a special report, says that New Haven has the lowest death rate of any seaport town of its size in the world, and that the ward containing the colleges has had, for five out of the past seven years, the lowest death rate of any ward in the city.

President Porter states that the cases of typhoid fever have been as follows: One graduate and one professional student, one of whom resided on the college premises, and both of whom had overworked very seriouly for several months. Both died, one at New Haven and the other at his house. Of the Senior Class, academical department, two, one terminating in death very early in the term, the attack having been ascribed to serious exposure; of the Junior Class, two, both convalescent; of the Sophomore Class, two or three, convalescent; of the Freshman Class, one, recovered. At present the students seem to be in their usual health and spirits. The President adds that no good reason seems to have been discovered for the sensational reports or for the temporary alarm which these reports occasioned.

Dirt and Disease.—Recent sanitary statistics collected by the Italian Government show that Rome is now the healthiest of all the large cities of Italy. That the improvement in the sanitary condition of Rome is due mainly to the attention which has been paid to cleanliness since the Italian occupation is shown by the fact that the new quarter—popularly called "Macao"—is the healthiest part of the city, while the Ghetto is the most unhealthy. "Macao" has wide streets and modern houses, furnished with proper drainage, while the Ghetto is in precisely the same state in which it has been for the last century—that is to say, a state of unspeakable filthiness.

The generally received theory as to the deadly nature of the Roman malarial fever is not sustained by recent statistics. The Ghetto, being densely inhabited, has always been remarkably free from fever. In fact, it was formerly the healthiest part of Rome. On the other hand, "Macao" is, without doubt, the most malarial district of the city, and few persons can live there without suffering some of the symptoms of malarial poisoning. Nevertheless, the death rate in "Macao" is much smaller than it is in the Ghetto. This proves that the Roman fever is not ordinarily a fatal disease. In its worst form it is undoubtedly very dangerous, but it is very seldom that any one living prudently contracts it in this form. The people who live in "Macao" suffer much the same symptoms to which people who live in malarious districts are accustomed, but the small death rate in such places shows that one may shake a long while with impunity. It was the dirt of Rome which formerly made it an unhealthy city, and were the Ghetto to be thoroughly cleaned, Rome would be one of the healthiest cities in Europe.

Bad State of Russian Prisons.—Judging by the figures contained in recent official medical reports, the sanitary condition of some of the prisons of Russia appears to be as bad as when the English philanthropist, Howard, visited them a century ago. Thus, the prison at Tomsk, in which the persons condemned to exile in Siberia are lodged prior to setting out in gangs on their eastward journey, has of late proved a veritable pest-house. In the year 1882 no fewer than 1,268 of the prisoners there were treated for typhus fever. A still larger number suffered from attacks of dysentery and recurrent fever, while 1,311 others, mostly children, fell ill of diphtheria, small-pox and measles. Generally speaking, every inmate of the prison suffered from one or other of

the above-mentioned diseases, and many from more than one. The number of deaths was very considerable.

THE FIFTH CASE, IN FIFTY YEARS, IN BROOKLYN OF MALIGNANT PUSTULE.—Death from malignant pustule was the verdict rendered, January 30, by a jury of doctors in the case of Mrs. Mary R. Forrester, who died at her home, No. 199 York street, Brooklyn, on Tuesday, January 29. Dr. F. H. Ross was called at 5.30 o'clock on the morning of that day to attend Mrs. Forrester. She was to become a mother in several months, and was suffering from pains in the back and lower part of the abdomen. The doctor prescribed the medicine usual in such cases, and returned to see his patient again at 9.30 o'clock. The medicine had not produced any apparent effect. Dr. Ross noticed that there was a small chocolate-colored spot about the size of a five cent piece on Mrs. Forrester's nose. A hypodermic injection was administered, and the doctor did not again see his patient until 2 o'clock in the afternoon. The case had then assumed a serious aspect. The discoloration had extended down each side of the face, the patient was delirious, and the action of the heart was weak. Three hours later a general disintegration had set in. The face, neck, and chest had turned to what the doctor described as "a dead color," and at eight o'clock in the evening the woman died. Decomposition set in twelve hours after death and when Coroner Menninger's attention was called to the case it was deemed unsafe to make an autopsy. Mrs. Forrester was twenty-seven years of age and was the mother of three children. Death from malignant pustule is very rare, the Forrester case being the fifth that has occurred in Brooklyn in fifty years.

EVERY PATIENT HIS OWN CASE-BOOK.—Dr. Howard A. Kelly states in the *Medical News* that he has for more than sixteen months, while a resident in an American hospital, been in the habit of mapping out on the superficies of the body, in an indelible aniline color, the results of a physical exploration of the condition beneath. The markings remain fresh and clear from one to several weeks or longer, profuse sweating being the only symptom that is apt to obliterate them. He uses abbreviations to designate certain physical signs, the day and month being also recorded. The markings are made so prominent as to be legible to the largest clinical class. This suggestion by Dr. Kelly may be enlarged upon to a very considerable extent. The clinical professor, it is true, would not have the opportunity of showing how a close and careful diagnosis is made, but he would be able to show a much greater variety of cases, and have all his patients arranged like diagrams around him.

In fever patients, the daily record of the thermometer could be placed, with the date, on the borders of the axillary space, on the nates, or elsewhere, according to the mode of using it; the analysis of the urine with its specific gravity, etc., could be recorded micro-graphically on the perinæum; on the hypogastrium a record of all puerperal or uterine cases might be recorded; while over the epigastrium could be written the prescriptions and diet for the day, etc. The method proposed is, in all respects, excellent, and will, doubtless, be adopted.

THE HEALTH OF THE ARMY.—According to the report of the Surgeon-General of the Army for the year ending June 30, 1883, the diseases of the respiratory organs stand first in numerical importance, and of these 64 per cent. are catarrhs of the upper air passages. Extremes of variation in temperature will account in part for the frequency of these diseases, but to a larger extent insufficient ventilation of barracks and dormitories, as well as irregular and unequal distribution of artificial heat during cold weather, must be held responsible. Wounds, injuries and accidents stand second on the list of causes

impairing the effectiveness of the army. The large number recorded in this class may probably be attributed to the use of troops in mechanical and laborious employments which form so large a proportion of the soldier's duties. As an indication of the peculiar hardships to which the troops are exposed, the rates of admission for wounds, accidents, and injuries are 122 per thousand higher than those reported for the German army, and 142 per thousand higher than the decennial rate of the British army. It is interesting to note that the negro troops make a particularly favorable showing in the small number of admissions for alcoholism and its results, exhibiting, as they do, a rate of only 4 per thousand to a rate of 76 per thousand of mean strength among the whites. On the other hand, in diseases of the nervous system they have an unexplained preponderance.

Turn the Coward out.—Dr. Green, in the *Lancet*, says: 1. Always have the window opened before entering the patient's room or ward. 2. Never stand between the patient and the fire, but always between him and the open window. 3. If possible, change your coat before entering the room. 4. Do not go in for unnecessary auscultation or other physical examination. 5. Stay as short time as possible in the room. 6. Never, while in the room, swallow any saliva. 7. After leaving the sick-room, wash the hands with water containing an antiseptic. 8. Rinse the mouth with diluted "toilet sanitas" or Condy's fluid, also gargle the throat with it, and bathe the eyes, mouth and nostrils. 9. Expectorate and blow the nose immediately on leaving the sick-room. 10. Keep up the general health by good food, exercise and temperance. 11. In addition to the above recommendations, which are all pretty generally known, I would suggest another, which is, in my opinion, the most important of all. This is to filter all the air you breathe while in the sick-room or ward through an antiseptic medium. My method is to use a McKenzie's inhaler over the nose and mouth. I carefully soak the sponge in a strong solution of carbolic acid before entering the sick-room. It is so made that all the air breathed must necessarily come through this sponge, and the expired air is emitted by a valve action at another place. The only objection is the unsightly appearance one has with the inhaler. This objection is, however, a very slight one.—

American Pork and Trichinæ.—Mr. Frelinghuysen's statement, January 29, concerning the exclusion of American pork from the markets of Continental Europe is admirable in tone and temper, and very nearly conclusive as an exposition of the facts in the case. It was essential that there should be nothing irritating in the tone of it, because, although ostensibly intended for the information of Congress, it was really addressed to the people of the countries from which American pork is now excluded by executive action. The array of evidence is formidable already, and will no doubt be rendered irresistible by the report of the special commission to whom a scientific investigation has been entrusted. When that is done, the Governments which have excluded American pork will be compelled to avow that the sanitary pretext for the exclusion *is merely a pretext*, and to defend their action as a measure of protection. That they are doubtful of the result, if they take this ground, is indicated by the fact that they have not taken it already.

The *Herald* has printed the report of an interesting interview with Professor Virchow upon this subject, which is most noteworthy for his constant assumption that *the pretence of protecting the health of the German consumers of pork is a mere sham.*

Physicians' and Lawyers' Fees.—It is always gratifying to know that a man has not suffered by his devotion to the public good, and particularly in the cases

of the counsel who nobly abandoned their private practice in order to bring Brady and Dorsey to justice. They did not bring them to justice, but that is mere detail.

Mr. Bliss received in the two years from Nov. 8, 1881 to Nov, 9, 1883, the sum of $29,407.49, $807.59 being for disbursements. The services seem to be charged for on the broad general principle that the time of Mr. Bliss is worth $100 a day. But Mr. Ker has exceeded these charges with a bill for $31,877, while Mr. Merrick appears to have received $17,500 and Mr. Cook $5,250.

The appearance of Mr. Benjamin Harris Brewster with a bill of $5,000 for "professional services," which he is supposed to have rendered in return for a salary, is perhaps the most interesting incident brought out.

When the medical fees in the Garfield case were discussed in Congress they were generally denounced, yet they were but a fraction of the fees charged in this case. Congress is made up of lawyers; there are but six physicians in the two Bodies. Attorney's fees, however extortionate, are "passed," while physicians fees, however moderate, are "scaled" and denounced.

EUTHANASIA.—I had two patients within a year who, when they could not live, found it almost impossible to die. They were both good men, and had looked death in the face more than once without alarm. In the one, after a ten hours' struggle I asked, Would you like to sleep? The answer yes and the expression of joy replacing the anguish, were enough to warrant this consideration of the subject. One injection of morphia and there was rest in ten minutes, and a sleep that faded into death in four hours. In another, after a night with death, I said to the mother, Shall he sleep? There could be but one answer. If it is possible to prevent this suffering and let him sleep, let it be done at once.

I do not believe that it is right for one to take his own life because life is only prolonged misery and suffering; and I do not think it right, in such a case, for the physician to do that which would shorten the man's days. But when death is at the door and will not be said nay, then to open the door is an act of charity.—*Eclectic Med. Journal.*

WATER USED IN GREAT CITIES.—Sir Joseph Bazalgette has appended to the published report of his address a carefully compiled table giving a large amount of statistical and other information about the chief cities of the world. The 31 gallons of water per head supplied to London compare unfavorably with the 73.3 gallons used in Boston, Mass., the 60½ in New York, and the 54.15 in Philadelphia, though the return for the latter city adds that "nearly half is wasted." Chicago, which has the unparalleled reservoir of Lake Michigan close at hand, gives each of its citizens 102½ gallons a day, while the District of Columbia, which consists of Washington, Georgetown, and the surrounding country, has 143 gallons per head per day. All the American and Canadian cities thus possess a profusion of water which puts London supply to shame. On the Continent, Rome has the lead. From its four sources the city supplies 160.38 gallons a day of spring water for each inhabitant; Marseilles comes next with 158.4 gallons from the river Durance; while Hamburg pumps from the Elbe 45½ gallons per head, and Paris 36. Berlin, on the contrary, is content with 13.3.

MEDICAL DIPLOMAS.—The Senate Committee (Albany, N. Y.) on Miscellaneous Corporations and the Assembly Committee on Public Health held a joint session in the Assembly Chamber on Senator Campbell's bill creating a medical faculty, to consist of nine members, to be appointed by the Governor, which shall possess the power now vested in colleges for the examination of students and the granting of diplomas. The proposed faculty is to consist of six allo-

pathic and two homœpathic practitioners and one eclectic practitioner. Francis Lynde Stetson, of New York, Prof. Loomis, of the Medical Department of the University of New York, Prof. Curtis, of the College of Physicians and Surgeons, New York, the Hon. Ray V. Pierce, of Buffalo, Drs. Lee and Gunn, Dr. Henion, of Rochester, and others, representing as many different schools of medical practice, agreed in opposing the measure in its entirety. (Jan. 30th).

Doctors and Patients.—Some few months ago one of our medical celebrities was walking down Bruton street one afternoon with a friend, when they perceived coming toward them a strikingly handsome woman. Dr. Z. immediately seized his companion's arm, and without saying a word crossed rapidly over to the opposite side of the street, "What is that for?" inquired the other. "Why, the fact is," stammered out Hippocrates, "I dont particularly wish to meet that lady. I attended her husband last year—a very bad case indeed—and—" "I understand interrupted his friend, "he died under your care." "Worse than that," replied the physician, "a great deal worse. I cured him, and, from what I know of her, she is not likely to forgive or forget it."

The Rowell Trial for Murder.—Rowell, of Batavia, N. Y., who prearranged, in the most deliberate manner, and after a careful discussion with Palmer (his friend), to kill the paramour of his wife, and who did kill him while caught in the act of adultery, is undergoing his trial at Batavia. The doctors are, as usual, declaring him to be insane, when the man had actually in his preparations and determination given the highest proofs of his sanity. The doctors who pronounced him insane are, as usual, "experts"—Drs. S. C. Clark, of Lockport, N. Y., Edward C. Mann, of this city, H. A. Morse, Batavia, N.Y., and M. W. Townsend, Bergen, N. Y. When is this nuisance and this disgrace to cease? Later: The man has been acquitted on the ground of insanity, and then—held a grand reception!!

Dr. George W. M. Semple died at Hampton, Va., November 14, 1883, after an illness of four weeks. Thus has passed away, in a ripe old age, a good physician, an earnest student, a clear and careful thinker, and an upright, conscientious man. The news of his death will be learned with regret by all who value these qualities, and they will feel that in losing Dr. Semple the profession has lost one of its strongest and ablest supports; one of those particularly valuable supports which was always as strong morally as intellectually and professionally. His family have the warmest sympathy of all to whom their father was known.

The President of the United States, in his Message to Congress, refers to the removal by France of the prohibition against the importation of American pork, which he declares was due no less to the friendly representations of the American Government than to the growing conclusion in France that no danger was to be apprehended. The German Government had declined to send experts to Washington to inquire concerning the hog products, and a commission had been appointed in America to inquire into the subject. The real facts in this matter are that the German hog growers need protection in their business, and this nonsense about American pork is the result.

An Unfortunate Notice.—The following notice appeared in the *New York Daily Times*, of January 31st, 1884. Apart from the absurdity of the statement contained in it, all who object to such methods will deplore the appearance of such a notice. It is as follows: "An operation for lithotrity was yesterday performed upon ex-Gov. Fenton as a means of relief from a malady which has

seriously troubled him for years. The operation was performed by Dr. E. L. Keyes, assisted by several eminent physicians and surgeons. The operation was in every way successful, and physicians say that the ex-Governor will be able to appear among his friends in a few days fully restored to health."

THE BODIES OF DE LONG'S PARTY.—Moscow, Jan. 30.—Lieut. G. B. Harber and Master W. H. Schuetze, escorting the corpses of Lieut. De Long and comrades of the Jeannette expedition, started for Hamburg to-day on their way to America. A solemn procession followed the coffins to the railroad station, where the chief Lutheran pastor of the city delivered an address. Many wreaths were deposited on the coffins, including one from the students of the Moscow University. Dr. Ambler's body (for Fredericksburg, Va.) is among them.

ONE EXCUSE FOR QUICK TREATMENT.—One of the Vienna surgeons was one day called in hottest haste to see the little son of a well-known Austrian count. On reaching his patient he found a trifling scratch on the child's hand. Sitting down and writing a prescription he gave it to one of the servants with instructions not to lose an instant, but to bring the medicine as soon as possible. "And is the danger so imminent, then?" asked the countess. "No, not that," replied the Professor; "I only feared lest the wound should be entirely healed before the servant returned."—*Medical Record.*

DR. PHILIP S. WALES.—The period for which this eminent naval officer and distinguished surgeon was appointed Surgeon-General of the United States Navy, expired January 26th, 1884. One of the bureau officers will discharge the duties of the office named until a Surgeon-General of the Navy is appointed. Surgeon-General Wales has served with great efficiency, brilliancy and success; and the medical profession of this country have taken great pleasure, pride and interest in his administration.

DR. J. MARION SIMS.—The British *Medical Journal* pays the following tribute to the memory of the late J. Marion Sims: "His achievements are written in imperishable letters in the annals of modern surgical practice. The greatest success which any surgeon of genius can hope to achieve is to be able definitely and largely to add to the power of surgery to save life, to relieve misery, and to effect cure. This success Marion Sims attained in a degree which few can hope to attain."

GRADED MEDICAL SCHOOLS.—The "craze" for this class of colleges seems to be passing away, and very properly, The system of examining students in the most cardinal and important branches at the end of the first year, and then allowing them to neglect or forget these branches *and yet have a diploma*, is supreme folly. The old Edinburgh system of keeping up every study is by all means the best. It is the only sensible method.

"THIS PICTURE AND THAT."—When the old and new code men met to administer laws, to measure strength and *elect officers*, 599 ballots were cast. At the next meeting there were 16 present; 4 of these were reporters, 2 were presidents (outgoing and incoming), leaving a working Body of 10. Is the N. Y. County Medical Society a scientific Body?

DR. WILBUR, the superintendent of an idiot asylum in Illinois, purchased his supplies in open market in Chicago. This so offended the local merchants about the asylum that they exerted such political influence as to oust him from his

superintendency. *The Journal of Mental Diseases* says that similar occurrences are common in all the States. The more the shame. Corrupt measures are taken to secure the location of an asylum so that it may build up a little town.

VERY SAD.—PARKE DAVIS & CO.—The *Detroit Lancet*, in its January issue, says of this well-known house that "the name of this firm has made its way everywhere that the feet of men have gone, and *their bodies need the aid of medicines.*" This result of enterprise, fidelity and honesty in pharmacy is very novel and very sad. What medicines shall they have?

"VIRGINIA MEDICAL MONTHLY."—On January 1st, 1884, Dr. Wm. H. Coggeshall, of Richmond, by purchase, will become half owner and full associate editor of that journal. The editor of this JOURNAL wishes Drs. Edwards and Coggeshall an abundant success. They fully deserve it.

ICE.—The Senators of the United States consumed during the months of July and August, 1882, no less than two hundred and one thousand pounds of ice, and were compelled to take seventeen hundred two-grain quinine pills at the expense of the nation in order to tone up their several systems.

THE "ÆSCULAPIAN." BY BERMINGHAM & CO., VOL. I., NO. 1.—The publishers say of it: "We confidently assert that it is second to no journal published." For a first number such a statement has, at least, the merit of novelty.

THE proceedings of the Sims' memorial meeting at Washington will be read with great interest and profit by all. The addresses made were in every respect excellent, and Dr. Toner's biography of Sims is invaluable. It will be historic for its scope and accuracy.

BERMINGHAM & CO.—The profession and the press will be sorry to learn of the failure of this enterprising and energetic house, which recently was publishing in this city the *Medical Gazette*, the *Æsculapian*, and many medical works. It is to be hoped that the house can resume operations again.

THE New York College of Midwifery, if not a swindle, is, at least, a most disreputable institution, and the sooner reputable physicians leave it the better will it be for their honor, peace and prosperity.

THE "LONDON MEDICAL TIMES AND GAZETTE."—This old and sterling British medical weekly is sent with this journal for $9. It is one of the best journals published.

THE practice for sale in this JOURNAL is well worthy of attention. It is an excellent location; the statements made in regard to it are strictly correct, and the physician offering the property is worthy of the most absolute confidence.

A CREMATION SOCIETY FORMED.—New Orleans, Jan. 30.—A meeting of cremationists was held here to-night, and it was decided to organize a society instead of a stock company, so that all favoring cremation might become members.

LILY OF THE VALLEY.—Read Dr. Squibb's article, in this number.

NOTICE.—Please read the last line on the title page.—ED.